

<b>Diversification in the financial markets</b> by Jyrki Haajanen	3
<b>Finland's trade with Russia and the Baltic countries</b> by Jouko Rautava	8
<b>Central bank independence and accountability – how does the European Central Bank fit into the picture?</b> by Olli Castrén	12
Items: Publications of the Bank of Finland	16
Measures concerning monetary and foreign exchange policy and the financial markets	18
Visiting Scholars Programme	19
Finland in brief	20
Statistics • List of tables on page	S1
Charts • List of charts on page	S29
Bank of Finland Organization	

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# Diversification in the financial markets

by **Jyrki Haajanen**, Economist  
Financial Markets Department  
Bank of Finland

**B**anks have performed essentially the same basic functions for the last several decades. These traditionally include the taking of short-term deposits from the public and the granting of long-term loans for various investment purposes. Banks have thus performed the task of liquidity and maturity transformation while bearing the interest rate and liquidity risks that arise with the combination of short-term liquid deposits and long-term illiquid investments. Banks have also generally played an important role in the intermediation of payments.

Arguably the most important task that banks have performed is financial intermediation. A modern economy needs a system that enables fluid financial intermediation at minimum cost to society. In fact, the banks' role in facilitating smooth functioning of the financial system has been considered so crucial as to warrant the control of banking via various degrees of regulation. The main argument for such regulation has been that market forces alone cannot ensure that financial intermediation is sufficiently efficient and trouble-free. Another often raised argument in favour of regulation is the weak position of consumers and small investors relative to banks and other institutional participants in the financial markets. However, the internationalization of banking and integration of financial markets have necessitated some alleviation of financial regulation and opening up of national financial markets to foreign competition.

The nature of regulation has also changed. The earlier emphasis was clearly on prices and volumes whereas nowadays it is more on the guidance of supervised entities' practices.

Besides deregulation, another catalyst for change in banking has been rapid technological development. Advances in information technology have paved the way for expansion and internationalization of financial activities and enabled the development of brand new products and markets. Many banking services previously requiring sizable investments by the banks and an extensive distribution network can now be provided via modern technology at lower costs and without a dense branch network.

Recent developments have not only heightened competition within the banking and financial sector

but have also extended competition beyond traditional banking. The banking business is increasingly attracting companies that operate in other sectors not previously associated with banking. Likewise, banks have begun to engage in activities not traditionally included in the banking sphere. Such mixed conglomeration has become significantly more widespread in recent years.

## **Effects of financial regulation on diversification**

Regulation has a dual constraining impact on diversification in the financial markets. It restricts both nonfinancial firms' possibilities of competing in the financial sector and credit institutions' possibilities of competing in areas outside of traditional banking.

Regulation provides guidance for both the activities of participants in the financial sector and relations between the financial and nonfinancial sectors. Thus financial regulation can be considered to have an influence also on business activities in the nonfinancial sector. Regulation can be divided into two categories by area of influence:

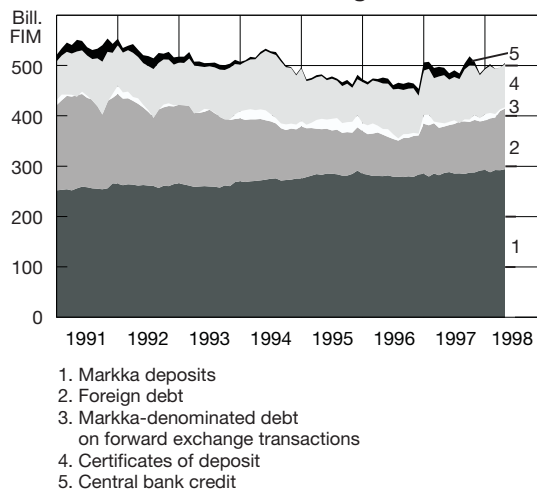
- internal regulation of the financial industry and
- regulation of relations between financial and nonfinancial sectors.

Internal regulations restricting financial activities have conventionally taken the form of restrictions and rules governing lending and interest rates. Foreign currency transactions and cross-border payment transfers comprise another area of control of banking activities. However, in recent years restrictions on banking and finance have been dismantled at an accelerating pace. Foreign currency flows, interest rates and lending have indeed been extensively deregulated in most western countries. In Europe, one of the essential requirements for efficient functioning of the EU's single market is less regulation and more harmonization. Gradual financial deregulation has actually been one of the EU's prime objectives in the development of the single market.

Various regulations on products and provision of services have also acted as internal constraints on financial activities. Strict segregation of services in the areas of deposit and investment banking has

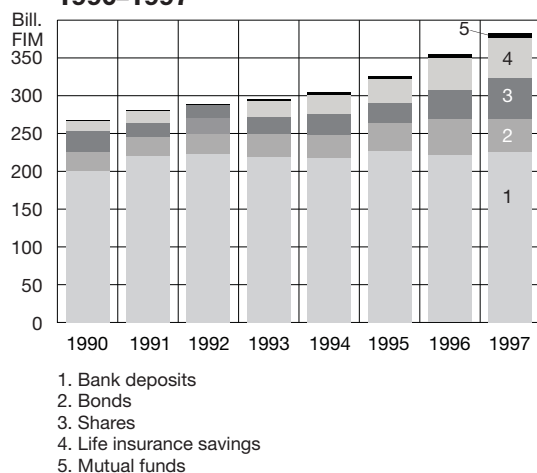
**Chart 1.**

**Structure of bank funding**



**Chart 2.**

**Households' financial assets in Finland, 1990-1997**



Source: Finnish Bankers' Association

well. Borders between different financial service providers have largely disappeared, and geographic location of business outlets is no longer restricted to the same extent as before. The EU has been at the forefront in these developments in allowing credit institutions and investment services providers to freely establish branches within the EU area.

Regulation is not limited to activities within the financial sector but also affects the relationship between financial and nonfinancial sectors. This is most clearly seen in the relations between banking and insurance. Banking has been segregated from insurance via regulations concerning both ownership rights as well as the supply, distribution and management of various products. Moreover, activities in both sectors are generally subject to authorization. The types of activities that an authorized entity can conduct are defined in the authorization terms. Authorizations often tend to create different degrees of product or service monopolies, which restricts competition within the concerned sectors.

By contrast, regulation of relations between banks and non-insurance enterprises have generally been limited in scope to ownership rights. Banks have been permitted to own limited amounts of shares in nonfinancial companies. Nonfinancial companies' scope for owning banks have often been similarly restricted.

**Effects of diversification on banks' business operations**

Division of banks' core business operations into three areas – deposits, lending and payment transactions – enables area-specific analysis of the effects of diversification.

**Deposits**

In Finland deposit-taking from the public is the exclusive right of banks. This right has been considered essential to banking because accumulated deposits enable banks to make loans to their customers. For banks, deposits are an advantageous source of funding because the interest rates paid on deposits are generally substantially lower than 'market rates'. Even though interest rate margins between deposits and lending have been narrowing for the past few years, banks profitability is still largely based on these margins. Deposits comprise the primary source of funding for Finnish banks (Chart 1).

Households' asset holdings in low-yield accounts naturally attract competition from outside the banking sector. Alternative saving modes – such as various types of mutual funds, direct investment in shares, and voluntary life and pension insurance – are now becoming available. These products compete with bank deposits by offering higher yields. However, mutual funds and saving via pension schemes are often best suited for depositors who can make fairly large investments and who are willing to tie up their money for longer time periods. Moreover,

been the most common restriction. Geographic location of bank branches and the establishment of foreign business outlets have often been subject to regulations of varying stringency. Recent developments have however led to an easing of these regulations as

these investment modes are still less liquid than bank deposits. On the other hand, mutual funds are rapidly diversifying in terms of product-service range, and in many countries they already provide liquidity and convenience on a par with bank deposits. The amount of money invested in mutual funds and voluntary life and pension insurance is still modest compared to the total amount of bank deposits (Chart 2). The structure of household assets in Finland is quite different than that in other European countries. Nonetheless, alternative savings outlets can be expected to gain wider acceptance also in Finland over the next few years. There are already signs of change in households' saving behaviour.

Banks have not been mere bystanders in the process of innovation in savings products. They have been active competitors via their own subsidiaries. Success in this competition helps to mitigate the effects of more expensive funding, as new products provide lower-cost alternatives to pure market-based funding. Banks' market shares in the new saving modes are indeed significant in many respects (Chart 3).

Bank deposits differ essentially from other forms of saving because of deposit insurance. A deposit insurance scheme that protects bank deposits will play a key role in deposit-investment decisions of risk-averse households. Market research has indicated that security is perceived as the most important consideration in the selection of an investment outlet. In principle, if nonbank companies were allowed to take deposits, nothing would prevent them from setting up a deposit insurance scheme similar to that of the banking sector. In such case, there would be no essential difference between bank and nonbank deposits. Reform of the deposit insurance scheme at the start of 1998 was in fact a step toward abolition of the privileged position of bank deposits.

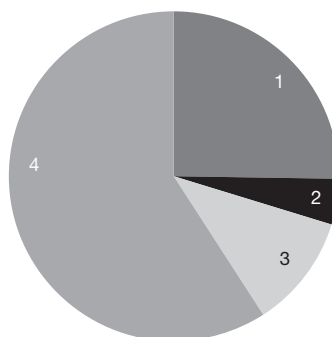
Any rapid change in households' saving behaviour would pose problems for the banks, as even partial displacement of deposits by market-priced funding would result in additional costs to banks. And any sharp increase in funding costs would inevitably lead to a decline in banks' net income from financial operations. Such an income loss would need to be offset by other earnings or cost cutting.

Companies are not quite as dependent on bank deposits as are households, due to the fact that companies can generally place funds directly in the money market more readily than households. Moreover, interest rates paid on corporate deposits are often closer to market rates than are those paid on households' deposits.

Nonbank companies can also enter the bank deposit market by establishing banks of their own. For example, the two largest retail chains in the United Kingdom, Tesco and Sainsbury's, as well as IKEA in Sweden, have each established a bank to support their core business. Although this might be

**Chart 3.**

**Market shares of life insurance companies, 1997**



- 1. Merita
- 2. Leonia
- 3. Aurum
- 4. Insurance companies

a tempting alternative, experience shows that establishment of a bank merely to support a company's other business activities is generally difficult and costly.

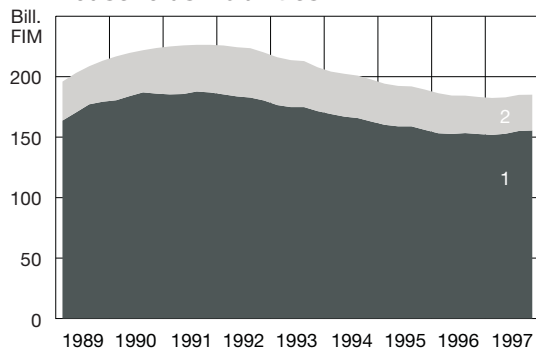
It is dismantlement of the deposit monopoly that would pose a real threat to the banks. Extending the deposit-taking rights beyond the banking sector would bring many changes. Besides mutual funds, we might well see insurance companies, retailers and others competing for their customers' deposits. These companies could easily provide households with deposit forms directly comparable to bank deposits. Such a turn of events would be inevitably mean tough price competition for the banks.

**Lending**

In countries like Finland, in which the money and capital markets developed at a rather late stage, banks have attained a very strong position in financial intermediation. Banks have clearly been (and still are) the main source of financing for companies and households. Only in recent years have alternative financing sources begun to take their place alongside the banks. But since these new financing channels are for the most part bank-owned, the supply of financing has remained within the banking sector. Hence the possibility of freely tapping different domestic and foreign sources for financing generally applies only to large companies. For small and medium-sized companies and households, banks still constitute the main source of fi-

**Chart 4.**

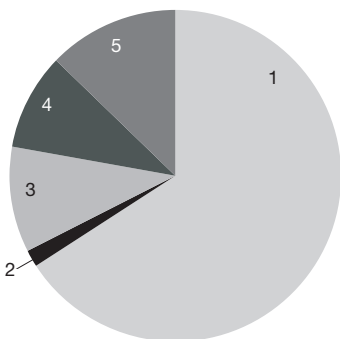
**Households' liabilities**



- 1. Bank lending to households (incl. self-employed)
- 2. Other lending to households

**Chart 5.**

**External financing of small and medium-sized companies**



- 1. Bank lending
- 2. Foreign currency-denominated borrowing
- 3. TEL and insurance company lending
- 4. Regional Development Fund loans
- 5. Other

Source: Financial markets information, The Federation of Finnish Enterprises, May 1998

financing channels. Because lending was long controlled via regulation and taxation, competitive forms of financing have only recently begun to appear on the scene. The development of new financing channels is affected not only by regulatory changes but also importantly by factors such as changes in the behaviour and habits of companies and households as well as their adaptation to a changing environment.

Financing costs play a crucial role in the supply of financing. Reliance solely on the money and capital markets as a financing source does not generally enable a nonbank enterprise to compete on an equal basis with deposit banks. Deposit banks' margin between funding and lending rates clearly gives them a head start in interest rate competition (Chart 6). Genuine competition would also require equality on the funding side.

**Payment transactions**

Payment transactions are regulated and supervised by several different bodies. Regulations governing payment transactions however differ from other financial regulations in that they are based mainly on self-regulation by participants. The opportunity to provide payment transfer services is in principle unfettered, albeit encumbered with heavy regulation. Nonetheless, the handling of payment transactions is in practice highly concentrated in the banking sector.

Again, bank deposits may be seen as the main obstacle to external competition in payment transactions. Independent provision of payment transfer services is not possible without deposit accounts and the presence of customer funds in such accounts. Externally supplied payment transfer services are always, at some point in the process, dependent on bank accounts. This factor acts as an important barrier to genuine competition from outside the banking sector. As long as the liquid assets of households and companies continue to be concentrated in various types of bank accounts, it is unlikely that banks will face serious competition from outside the banking sector.

The situation could nonetheless change in the future, for two primary reasons. The first is the trend toward permitting deposit-taking also by nonbank enterprises. This tends to open up the provision of payment transfer services to competition from companies that either already have a distribution network or are capable of establishing one at a reasonable cost. In that case, payment transactions would no longer depend on assets being held within the banking system but would enable the development of a parallel competitive payment transfer system that would function independently of the banking sector.

Secondly, the competitive situation could change in the future despite banks' deposit monopoly as a result of rapid advances in information technology. New technical solutions and new prod-

nancing (Charts 4 and 5). In Finland the supply of financing is particularly heavily concentrated in the banking sector.

There are rather few regulations in effect that directly restrict lending, and regulation cannot be held solely responsible for the present structure of

ucts enable the emergence of totally new payment transfer channels. Internet and electronic money, for example, may soon enable nonbank enterprises to compete in the provision of payment transfer services. In particular, the extension of electronic money issuance beyond the banking sector might pave the way for a totally new type of payment transfer channel.

### **The outlook for financial diversification**

Financial diversification has already in its present form affected structures in the banking sector in many different ways. Banks now face competition from other sectors that is focusing increasingly on the core banking activities. However, external competition and further diversification are still hampered by various kinds of regulations governing banking and finance.

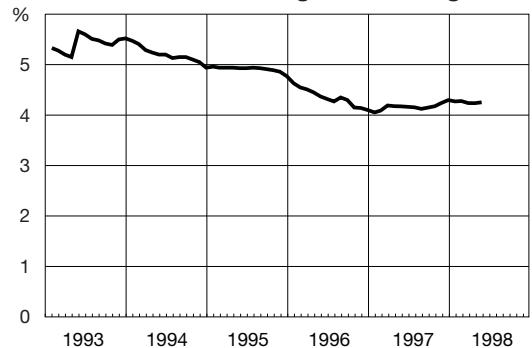
Rapid technological advances and financial innovations are constantly creating products that are alternatives to bank deposits, thereby enabling the development of competitive payment transfer systems. Regulation can at most merely slow the diversification process; it cannot stop it.

Banks have likewise been looking for new income sources from outside traditional banking. Synergy benefits have been sought inter alia in the insurance business. The trend in the banking sector has clearly been toward greater concentration. Larger and more diversified units are formed with a view to gaining a competitive edge and a new role in a changing competitive environment. This tendency has been international, with Finnish banks being no exception to the overall trend. Mergers and other structural changes are common occurrences also in the Finnish banking and financial markets.

The process of structural change in the banking sector is certainly not over yet. Major changes can be expected over the next few years as well. It is highly unlikely that banking can in the future continue to be based on the three core areas – deposits, lending and payment transactions. Banks will encounter increasing competition in all these areas

**Chart 6.**

### **Interest rate margin between bank lending and funding**



and hence will need to expand their operations into new sectors and products. Deregulation and the advance of financial diversification will in fact within the next few years require a reassessment of the basic issues related to the conduct of banking as well as the role of banks in the society.

23 July 1998

- Key words: financial diversification, bank deposits, financial market regulation, core banking operations

# Finland's trade with Russia and the Baltic countries

by **Jouko Rautava**, Economist  
Institute for Economies in Transition  
Bank of Finland

The changes that are taking place in the political and economic regimes of eastern European countries affect not only the economies in transition but also profoundly affect developments in other countries. The economic consequences occur initially via changes in foreign trade and investment activity. Finland's trade with Russia and the Baltic countries provides an interesting case study for analysing the changes that occur in transition countries as regards foreign trade and hence also the broader changes that occur in the economic environment.

## **Russia and the Baltics: an important market area for Finland**

During the 'perestroika' era of the late 1980s and early 1990s, Finland's trade with the Soviet Union declined substantially both in markka terms and relative to Finland's total foreign trade. In 1991 – the last year of the Soviet Union's existence – Finland's exports to that country declined by 65 per cent and its share in total Finnish exports fell to less than 5 per cent. This significant decline in exports to the Soviet Union was also one of the causes of Finland's economic problems in the early 1990s, though its significance should not be exaggerated in light of the even more crucial domestic factors behind the recession.

However, after 1992 Finland's trade with Russia and the Baltic countries started to increase rapidly, stimulated by the devaluation of the markka in autumn 1991 and the currency's further weakening after it was allowed to float in autumn 1992. The rapid growth has since continued even in years when the markka has appreciated. Another interesting point, particularly as regards Russia, is that neither economic problems nor declining gross domestic product have slowed the growth.

The value of Finnish exports to Russia increased fivefold in 1992–1997 while exports to Estonia grew by more than sevenfold. The growth of imports from Russia and the Baltic countries has not been quite as rapid as for exports, and consequently Finland's trade balance vs these countries turned from a deficit in the early 1990s to a large surplus.

Because the total value of Finland's exports has only roughly doubled in the 1990s, the relative importance of Russia and the Baltic countries in our foreign trade has increased. In 1997 Russia and the Baltic countries accounted for nearly 12 per cent of Finland's total exports, with Russia accounting for over 7 per cent and Estonia for over 3 per cent. As shown in the table, Russia and the Baltics together comprise an important market area for Finnish manufacturing companies, comparable to Germany, which is our most important single-coun-

**Table. Foreign trade with selected countries, 1997**

	Imports, mill. FIM	Share, %	Exports, mill. FIM	Share, %	Trade balance
Total trade	159 192	100.0	211 695	100.0	52 503
EU	93 841	58.9	112 277	53.0	18 436
Germany	23 147	14.5	23 226	11.0	79
Russia	12 522	7.9	15 463	7.3	2 941
Estonia	2 188	1.4	6 719	3.2	4 532
Latvia	173	0.1	1 439	0.7	1 266
Lithuania	156	0.1	855	0.4	699
US	11 719	7.4	14 733	7.0	3 014
Japan	8 586	5.4	4 025	1.9	-4 561
China*	3 477	2.2	7 758	3.7	4 281
Other Far Eastern countries**	4 671	2.9	11 977	5.7	7 306

\* China and Hong Kong

\*\* Indonesia, South Korea, Malaysia, Philippines, Singapore, Thailand, Taiwan

Source: National Board of Customs

try export market, or to the entire Far Eastern market, including Japan and China. Last year Finland exported more goods to Russia than eg to the US. The other CIS countries are of minor importance in Finland's foreign trade.

Russia is even more important in terms of Finland's imports, accounting for nearly 8 per cent of the total. Imports from the Baltic countries, particularly from Latvia and Lithuania, are very modest compared to Finnish exports to these countries. As a result, Finland's trade surplus vs the Baltic countries is twice as large that with Russia. Finland's trade with the Baltic countries thus reflects the Baltics' more general trade-balance problems.

According to Russian statistics, Finland accounted for less than 4 per cent of Russia's total foreign trade in 1997. Finland is naturally a considerably more important trading partner for Estonia. According to Estonian statistics, in 1997 Finland's share in total Estonian exports (16 per cent) ranked second to that of Russia (19 per cent) and, with a share of 23 per cent, Finland was by far the most important country in terms of Estonia's imports.

### **Substantial differences between Russian and Baltic markets**

Russia and the Baltic countries are very different as trading partners for Finland, which makes for interesting comparative analysis. Because the Baltic countries also differ widely from each other in many respects and because Estonia's share in Finland's trade with these countries is so dominant, the following more detailed analysis of the Baltic countries will focus on trade between Finland and Estonia.

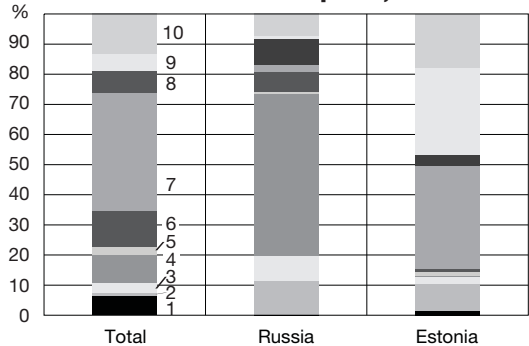
As shown in Chart 1, Finland imports mainly energy and raw materials from Russia, which account for over 70 per cent of Finnish imports from Russia. In 1997 energy alone (oil, natural gas, electricity) accounted for about 54 per cent of Finland's total imports from Russia. Imports of raw materials were mainly wood (11 per cent) and ores and scrap metal (8 per cent). The main imported manufactures were metal products (9 per cent) and chemicals (7 per cent).

The structure of Finland's imports from Estonia differs sharply from that of imports from Russia. Although the share of wood products in imports from Estonia is fairly high (9 per cent), the bulk of these imports is accounted for by machinery and transport equipment (34 per cent) and textiles and clothing (29 per cent).

As regards Finnish exports, the differences between the Russian and Estonian markets are not quite as great as for imports, but some differences can be found here too (Chart 2). Perhaps most notably, exports of foodstuffs still account for as much as 13 per cent of Finnish exports to Russia while their share in exports to Estonia is less than 7 per cent. On the other hand, raw materials and energy are considerably more important in Finnish exports

**Chart 1.**

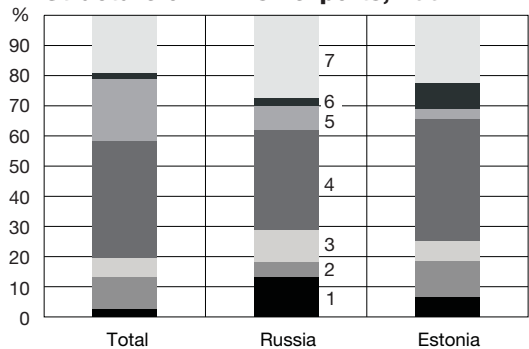
**Structure of Finnish imports, 1997**



1. Food and beverages
2. Wood products
3. Ores and scrap metal
4. Energy
5. Other primary commodities
6. Chemical products
7. Machinery and transport equipment
8. Metal products
9. Textiles and clothing
10. Other manufactures

**Chart 2.**

**Structure of Finnish exports, 1997**



1. Food and beverages
2. Primary commodities and energy
3. Chemical products
4. Machinery and transport equipment
5. Paper and cardboard
6. Textiles and clothing
7. Other manufactures



to Estonia than to Russia, which is quite natural in light of Estonia's relative scarcity of natural resources. Machinery and transport equipment account for 41 per cent of Finnish exports to Estonia compared with 33 per cent to Russia, which is one indication of the greater importance of capital goods in exports to Estonia as compared to Russia.

### **Economic reform dynamics are affecting trade patterns**

Finland's trade with Russia and Estonia reflects in a tangible way the differences in these countries' natural resources, as indicated eg by the share of energy and raw materials in Finland's imports from Russia. The structure and development of trade also say a lot about economic reforms and their progress in Russia and Estonia.

Since the collapse of the Soviet system, the economic power structures in Russia and Estonia have changed dramatically. Finland's paper exports serve as an interesting example. As late as the end of the 1980s, paper and paperboard accounted for about 17–19 per cent of annual Finnish exports to the Soviet Union. In 1992, following the collapse of the Soviet system, the share of these exports in total Finnish exports to Russia and Estonia fell below 3 per cent. For the paper industry, the collapse of these markets cannot be attributed to poor competitiveness. The Finnish paper industry has been forced to maintain its competitiveness in order to succeed in the major western markets. Instead, the collapse of exports reflects the relative weakening of the industry's traditional customers in Russia and Estonia amid the turmoil of economic reform. However, that more changes are in the offing is evidenced by the fact that paper industry exports to Russia have in recent years grown considerably faster than other Finnish exports to Russia, and the paper industry's share in exports has risen to 8 per cent. Regarding Estonia, no such change has taken place; the share of paper industry exports has stayed around 2 per cent.

Exports of foodstuffs provide another interesting example of how changes in the structure of trade can reflect the reform process itself in Russia and Estonia. The rapid growth of foodstuff exports to Russia in the early phase of economic reform was a clear indication of problems in respect of Russia's own production. The share of foodstuff exports in Finland's total exports to Russia peaked at 23 per cent in 1994. Despite a continuing increase in the value of foodstuff exports, their share had declined to about 13 per cent by 1997. For Estonia, the corresponding peak (13 per cent) occurred in 1993 and the subsequent decline has been to about 7 per cent.

The relatively smaller share of foodstuffs and consumption goods in Finnish exports to Estonia compared with exports to Russia at least suggests that economic reforms may have been carried out much more swiftly and extensively in Estonia than

in Russia. Estonia's relatively favourable business environment has been a stimulant to new investment, which again is reflected in the structure of both imports and exports. Besides the foodstuffs industry, we have seen significant investments in Estonia by Finnish companies eg in the electronics and textile and clothing industries, which together with Finnish exports of capital goods have an impact on the structure of trade between Finland and Estonia via materials flows in connection with subcontracting.

In Russia the process of changing the economic environment has been considerably slower and more problematic. In addition to general problems related to taxation and legislation, the foodstuffs industry is one of the industries that has suffered from the undeveloped state of distribution channels and of the packaging industry that is so necessary to a modern foodstuffs industry. Partly due to the diversity of problems concerning production and investment, the share of capital goods in Finnish exports to Russia has been smaller than in Finnish exports to Estonia. On the other hand, the frequently heard claim that Finland is exporting only foodstuffs to Russia is not supported by the trade statistics.

In the context of economic reforms in Russia and Estonia, the question naturally arises as to the role of the foreign trade system itself in the fluency and development of trade. As is well known, Estonia opened up its foreign trade at the onset of the economic reform to such an extent that today the country has one of the world's most liberal foreign trade systems. Owing to a well functioning free trade arrangement, Finnish-Estonian trade has not encountered any significant problems associated with customs duties, charges or administrative procedures. However, there is concern over the imbalance of trade with Estonia and uncertainty as to how the situation can be alleviated.

In Russia the regime change also in this area has been slower and the liberalization of trade less straightforward. Various types of charges and problems related to customs duties, transport and border crossings have been discussed repeatedly, with solutions being sought at both the national and European Union levels. Over the years there has nonetheless been a clear improvement also in the Russian situation. International agreements such as the partnership and cooperation agreement (PCA) between the EU and Russia, as well as various preparations for agreements such as discussions on Russia's membership in the WTO, have significantly helped to make the Russian foreign trade system more transparent.

### **Further changes to come in trade with Russia and Estonia**

The volume of Finland's trade with Russia and Estonia has increased rapidly during the 1990s. At the same time, there have been substantial changes in the structure of trade; in addition to nor-

mal price fluctuations, these are linked to economic developments and changes in the structures of the Russian and Estonian economies. The changes that are in progress in Russia and the Baltics mean that also future changes in trade with these countries will be relatively large.

During the first quarter of 1998 the value of Finland's total exports grew by 21 per cent and imports by 16 per cent. In the same period Finnish exports to Russia rose by 36 per cent and imports by 3 per cent, while Finnish exports to Estonia increased by 26 per cent and imports from Estonia by 23 per cent. As for short-run developments in Russia, it will be interesting to see to what extent the declines in oil and raw materials prices from last year's levels, as well as the current financial turmoil

in Russia, will affect Finland's imports and its export prospects vis-à-vis Russia. As regards future trade with Estonia, one's attention might well be drawn to that country's sizable trade deficit and the handling of the situation.

21 June 1998

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- Key words: foreign trade, Finland, Russia, Estonia

# Central bank independence and accountability – how does the European Central Bank fit into the picture?<sup>1</sup>

by Olli Castrén, Economist  
Monetary Policy Department  
Bank of Finland

Over the past decade there have been striking developments among central banks in the OECD countries, focusing their aim on maintaining price stability, giving them the independence to achieve that aim at minimum cost to society and making them open and accountable for their actions. The European Central Bank (ECB), which comes into full operation on 1 January 1999, is in many respects the culmination of this process. It has the objective of price stability laid down for it clearly in the Maastricht Treaty. It is drawing directly on the combined expertise of the 11 central banks in the euro-area in the European System of Central Banks (ESCB). Yet as a monetary authority spanning a group of independent states it has a unique position and presents unique problems of implementation and control. It is the purpose of this article to see how the ESCB fits into the international spectrum, as its independence and accountability have attracted considerable public attention.

There is however no accepted way of classifying all the different schemes of independence and accountability that have been implemented. This article presents one possible framework for assessment. In what follows, I make a distinction between two types of central bank independence, namely goal independence and instrument independence, and analyse the role of accountability under these two regimes. I also present some empirical evidence on the combinations of independence and accountability that are observable in real-world central banking institutions, and discuss the position of the ESCB in that classification.

## Different forms of central bank independence

The OECD countries have all decided that price stability should be an objective of macroeconomic policy. However, there are other objectives for macroeconomic policy and some, such as achieving 'full employment', interact with price stability. In particular, governments have found that shorter-run

concerns tend to conflict with the objective of price stability. As a result, not only is price stability frequently not achieved but governments also find that they cannot make a pre-commitment to achieve it that society finds credible.

Central banks offer a way out of this problem. Not only is monetary policy rather ill-suited to achieving other aims of macroeconomic policy but it can be used effectively to achieve price stability. It is therefore possible for a government to give a central bank the task of maintaining price stability and to set up the rules of operation in such a way that it and future governments are inhibited from subsequently 'interfering' in the achievement of that objective. Such an inhibition is usually achieved by making the central bank in some sense 'independent'.

That independence can be at either of two main levels. The central bank can be given solely *instrument independence* or it can additionally be given *goal independence*. At this point I want to stress that a 'goal' here refers to an *intermediate policy target*, that the central bank uses as a more readily observable proxy for the *final target*. The final target, price stability, is set by a democratically empowered societal institution such as a parliament (or, as regards the ESCB, the Maastricht Treaty, ratified by the democratic processes of all the Member States). Examples of intermediate targets are various inflation gauges (price indices), growth rates of monetary aggregates, and the growth rate of nominal GDP.

Instrument independence refers to the central bank being assigned an intermediate target (usually by the government) and using its own discretion in trying to attain that target. Having goal independence, on the other hand, means that the central bank is allowed to choose the intermediate target that it will aim at in an effort to achieve the final target. However, the dividing lines are not hard and fast. By closely specifying price stability as an inflation target, the government may effectively commit a central bank to a particular approach to its achievement. By setting out rules for the exchange rate or indulging in major exchange rate operations itself, the government can similarly limit the effective instrument-independence of the bank.

<sup>1</sup> This article draws in part from the author's PhD thesis, at the University of Warwick, UK, which has been published as 'Fiscal-Monetary Policy Coordination and Central Bank Independence', Bank of Finland Studies E:12, 1998. Many helpful comments by David Mayes are acknowledged.

## **Accountability under instrument independence**

Some governments have judged it sufficient to delegate daily conduct of monetary policy to an independent central bank while retaining the right to specify the bank's policy targets. Examples of such instrument-independent central banks are the Bank of England and the Reserve Bank of New Zealand.

Under instrument independence, the central bank is held formally accountable to the government. In practice, accountability can take the form of published inflation reports in which both past and future inflation developments are assessed in a transparent manner. Further means of accountability are published minutes of the meetings of the central bank's board, or public hearings of the governors and other board members. For example, in the UK the governor of the Bank of England is obliged to submit an open letter to the government giving the reasons for any major deviation of inflation from the target and stating the measures that the Bank intends to take to correct the situation. In the US the chairman of the Federal Reserve board is required to explain his views on economic policy to the Congress regularly in the public 'Humphrey-Hawkins' testimony. And in New Zealand the governor of the Reserve Bank can be subject to dismissal in the event of poor performance.

Accountability serves two distinct functions. First, it enables elected officials to monitor the central bank's past and future actions. Second, accountability is important also from the standpoint of fiscal policy planning and labour market functioning, as accountability makes it easier for the participants in the wage setting process to predict future changes in monetary policy. This in turn helps to stabilize inflationary expectations.

## **Is there a role for accountability under goal independence?**

Another way to increase central bank independence is to give the bank not only the right to set its policy instruments on a daily basis but to allow it to choose its own intermediate targets as well. This is the way monetary policy is conducted in Germany, and similarly oriented central bank reforms have recently been effected in France, Spain, Sweden and Finland. However, one might well ask how the accountability requirements applicable under instrument independence can be satisfied if the central bank is allowed to set its own intermediate policy targets? More specifically, is it possible to identify an institution to which a goal-independent central bank could be held accountable and, if so, is there any reason why the central bank would want to be accountable to that institution?

As to the first point, a goal-independent central bank can be considered to be directly accountable to those economic agents who form inflationary expectations, ie participants in the financial markets and in the wage-setting process, as well as to the

general public. The ability to stabilize such expectations is a crucial determinant of the central bank's success in producing price stability. Thus the agents who form expectations in effect constitute an 'institution' by which a goal-independent central bank will be held accountable.

As to the second point, new central bank institutions tend to be characterized by uncertainty as to their precise objectives. Under such circumstances, inflationary expectations will always be higher than otherwise. Reflecting this uncertainty, rational economic agents will hedge their nominal contracts against unknown future inflation outcomes. The resulting inflation bias in expectations is distortionary, and hence it reduces the welfare of both the central bank and the society. By voluntarily accounting for its actions, ie by explaining its policy decisions and the means by which it executes them, and by explaining its outlook for future inflation, a goal-independent central bank can convey information on its monetary policy strategy and thereby reduce inflationary expectations.

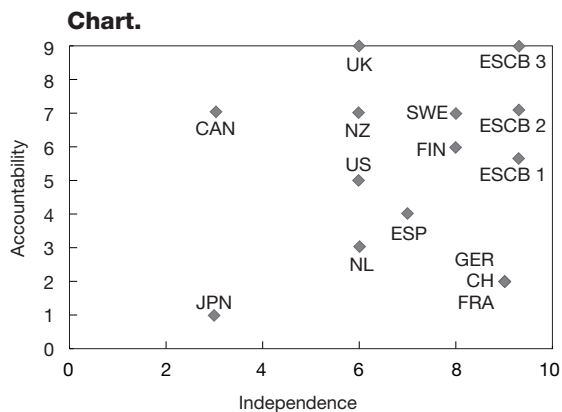
As regards the German Bundesbank, the right of this particular institution to set its own intermediate targets has been associated with a good and long-standing track record in monetary policy, in other words with a good anti-inflationary *reputation*. In fact, accountability can be regarded as a partial substitute for a good reputation in that it enables the central bank to gain credibility in a shorter period of time. Mainly for this reason, many newly proclaimed goal-independent central banks have been keen to build a policy framework that increases formal accountability.

## **Empirical evidence**

In the Chart below I have ranked central banks in 12 OECD countries by accountability on the vertical axis and by independence on the horizontal axis<sup>2</sup>. The date of comparison is June 1998, as the most recent date for which we can gain a reasonable idea of what any changes mean in practice. Five of the countries shown will be included in the ESCB from the outset and most countries have made some changes to central bank legislation in the last two years. The Bank of England's increased independence since May of 1997 has moved it rightward on the chart, for example. Furthermore, several central banks (eg Bank of Finland, Sveriges Riksbank and Banco de Espana) have voluntarily increased the extent to which they give account, resulting in an upward move in the chart.

It will be quite obvious from the foregoing discussion that no clearly objective measurement of either accountability or independence is possible and that an assessment must be made on the basis

<sup>2</sup> The criteria for ranking are modified versions of Bank of England's 1996 classification (in Briault, Haldane and King, Central Bank Independence and Accountability: Theory and Evidence, Bank of England Quarterly Bulletin, 1996). The chart also updates their findings.



of legal provisions, revealed actions and expressed intent. I have therefore taken four key aspects of both dimensions and then ranked each bank on a scale of 0 to 9 against them.<sup>3</sup>

#### Characteristics of independence

- 1 Is the central independent by statute?
- 2 Has the central bank established its independence by reputation?
- 3 Does the central bank have goal independence or only instrument independence?
- 4 Are more than half of the appointments to the Board made independently of government – are there government officials on the Board?

#### Characteristics of Accountability

- 1 Does the central bank enable frequent monitoring?
- 2 Does the central bank have an announced intermediate target?
- 3 Does the central bank publish a forward-looking 'Inflation Report'?
- 4 Are the minutes from Board meetings published?

The Bundesbank, Swiss National Bank and the Banque de France were at the most independent end of the spectrum and the Bank of Japan the least. The Bank of England, Bank of Canada, Reserve Bank of New Zealand and Sveriges Riksbank were among the most accountable, and the Bundesbank, Swiss National Bank, Banque de France and the Bank of Japan the least accountable. There is a clear spread of experience but with two generalized tendencies. More independence tends to go with more accountability. However, the most goal-independent central banks, ie the Bundesbank, Swiss National Bank and Banque de France, are counterexamples. Here reputation may stand in for some of the accountability, and hence these banks do not have the same need to explain. It is also interesting that central banks following direct inflation targeting tend to be more accountable, largely through choice rather than compulsion.

### Independence and accountability of the ESCB

By design, the ESCB is way down at the far end of the independence spectrum. It has clear statutory independence and must neither seek nor take instructions from external organizations, including Community institutions or bodies and governments of the Member States. While the price stability goal is set by treaty, the ESCB has the power to define the target and the method by which the target is to be achieved and to decide upon the instruments and their settings. The structure of the decision-making bodies and the terms of office of their members are such as to make external influence difficult. After the initial period, the Executive Board will be appointed for eight years without renewal. While there must be agreement among the member states on the membership of the Executive Board and consultation with the European Parliament, there is no single body that can control the appointments sufficiently to influence the outcome. The individual Member States each appoint only a single Governor.

However, the Treaty has relatively little to say about accountability. The ESCB will produce an annual report that will go to the European Parliament, the Commission, the Council and the European Council. The President of the ECB must to present the report to the European Parliament, which may debate it. The ESCB is therefore likely to be a little more accountable than the minimum of the national central banks on the Governing Council.

There is, however, almost no limit as to how far up the chart the ESCB can choose to go. A variety of views have been publicly expressed, including one by the European Parliament asking for substantial openness. A range of three points for the ESCB is therefore shown in the Chart. If it follows the prescribed minimum requirements, including an announced intermediate target and a constructive approach to the European Parliament, then it would be at point ECB1. If, in common with the inflation-targeting central banks, it were to produce a forward-looking and explanatory 'Price Stability Report' at least twice a year it would fall to around ESCB2 in the Chart. Finally if it were to adopt all the

<sup>3</sup> It is readily possible to produce alternative rankings and ranking schemes. I have made no attempt to gain agreement from the institutions depicted and hope that none disagree too strongly with my judgements. Different assessments of the key characteristics and subjective assessments are likely to shift the position of banks in the chart, but the overall characteristics are likely to be robust to most such realignments.

aspects of accountability and explain its decisions and rationale after each of its meetings, then it could be at the upper end of the spectrum at ESCB3.

As a new organization, covering an area in which some parts have had an inflationary history quite recently but aiming to quickly establish a reputation for the credible pursuit of price stability, a more open and accountable stance might seem appropriate. The fact that it is operating with a new currency involving innovations in instruments and operating procedures would tend to emphasize that. It must deal with financial institutions and market analysts who are not used to the procedures in Frankfurt and will need to handle public scepticism on a level different from that experienced by some of the constituent national central banks. A perceived error in the conduct of the common mone-

tary policy, whether due to an actual misjudgement on the part of the ESCB or merely to poor communication, could lead to embarrassment and significant political and economic costs. Therefore, the ESCB will clearly want to eliminate all unnecessary uncertainty as quickly as possible.

5 August 1998

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- Key words: ESCB, central bank independence, central bank accountability, instrument independence, goal independence

# Items

## Publications of the Bank of Finland

A new publication, *Payment system risks in Finland and the need for regulation and supervision*, by Harry Leinonen and Veikko Saarinen has appeared in the Bank of Finland Series A (A:101).

Regulation and control of payment system risks can be justified by the fact that, since payment systems are an integral part of the financial sector infrastructure, disturbances therein can spread widely through the society. The payment system risks that need to be controlled are classified here in the following basic categories: credit risks; liquidity risks; environment risks; clearing and settlement risks; and operating risks. Payment systems subject to supervision are categorized by the payment media used, so that the risk profiles within each category are as uniform as possible. The report also discussed means of reducing payment system risks.

The report scrutinizes in particular the risks inherent in Finnish payment and settlement systems. In Finland overall payment system regulations and norms are based on legislation governing credit institutions, the Bank of Finland and the Financial Supervision Authority as well as on self-regulation. The Bank and the Financial Supervision Authority are jointly responsible for the supervision of Finnish payment systems. The Bank is responsible for controlling systemic risk and for overseeing payment systems as a whole, and the Financial Supervision Authority supervises and monitors individual credit institutions in respect of payment system risks. Because risks are constantly changing, regulation and supervision of payment systems need to be continually updated. As the new operating environment including the European Central Bank and the ESCB unfolds, new features will mark the supervision of payment systems and in general we will see more intense international cooperation in the area of payment systems.

Helsinki 1998. ISBN 951-686-577-1. ISSN 1238-1683.

- Key words: payment systems, payment transactions, regulation, supervision, risks

The doctoral dissertation by Olli Castrén, *Fiscal-Monetary Policy Coordination and Central Bank Independence*, has been published in the Bank of Finland Series E (E:12). The study contains four essays in the areas of fiscal-monetary policy coordination, public finance and optimal monetary institutions.

Essay 1 analyses inflation targeting in an economy with decentralized monetary and fiscal policies and centralized wage setting. Depending on the specification of the trade unions' utility functions, both fiscal and monetary policy can be subject to time-inconsistency problems. Inflation targeting can achieve society's optimal outcome in this model only when the trade unions do not have an employment target which is lower than full employment. The result is robust to uncertainty about the monetary authority's preferences.

Essay 2 studies inflation targeting in the context of a monetary union. The setup resembles the Maastricht treaty, where a politically representative council delegates monetary policy to an independent central bank. The optimal delegation decision is shown to include an inflation target and a central banker with conservative preferences. It is shown that fiscal discipline in the union increases under such optimal delegation. Moreover, if the voting rules for the delegating council are designed optimally, the council's incentives to renegotiate ex post the central bank's target can be eliminated.

Essay 3 focuses on central bank (CB) institutions and fiscal-monetary policy coordination under debt stabilization programmes. When the government and the CB cooperate, a less inflation-averse CB induces faster debt reduction. Under noncooperative strategies, the opposite result holds. In the presence of political instability, the government shifts fiscal adjustment to the future. Additional adjustment time does not alleviate the situation, but electoral incentives can induce earlier adjustment.

Essay 4 looks at optimal fiscal policy in the presence of foreseeable shocks. When the government cares about the future, the deficit is optimally set lower before the arrival of the shock and more adjustment effort is shifted from ex post to ex ante. In EMU, fiscal policy will be constrained by the Stability and Growth Pact, which penalizes excessive deficits. Thus, in the presence of shocks, fiscal

policy before the shock can become highly restrictive under the pact.

Helsinki 1998. ISBN 951-686-580-1. ISSN 1238-1691.

- Key words: fiscal-monetary policy coordination, optimal institutions, inflation targeting, dynamic budget constraint, debt stabilization



# Measures concerning monetary and foreign exchange policy and the financial markets

1997

## SEPTEMBER

**Tender rate.** On 15 September, the Bank of Finland raises its tender rate from 3.00 per cent to 3.25 per cent. In addition, the interest rate on banks' excess reserves is raised from 1.00 per cent to 1.25 per cent.

## NOVEMBER

**Money market tenders.** As at 3 November, the Bank of Finland shortens the maturity applied in its money market tenders from one month to two weeks. The normal settlement day for these tenders will be the banking day following the trade day.

**Liquidity credit.** As at 3 November, the Bank of Finland shortens the maturity applied in its liquidity credit from seven days to one day. The Bank of Finland also abolishes the limits on collateralized liquidity credit.

1998

## JANUARY

### **Finnish deposit guarantee scheme revised.**

The Finnish deposit guarantee scheme is revised as from the start of 1998 by amendment and extension of the Act on Credit Institutions (1229/97). All deposit banks must now belong to a common deposit guarantee fund. Instead of the previous full coverage, the guarantee is now limited to a maximum of FIM 150 000 per depositor/bank.

## MARCH

**Tender rate.** On 19 March, the Bank of Finland raises its tender rate from 3.25 per cent to 3.40 per cent. In addition, the interest rate on banks' excess reserves is raised from 1.25 per cent to 1.40 per cent.

## APRIL

**Abolishment of stamp tax on lending.** Parliament has abrogated the stamp tax as it applies to lending and mortgages, effective with respect to agreements concluded on or after 29 April 1998.



# VISITING SCHOLARS PROGRAMME

## BANK OF FINLAND

*The Bank of Finland, the central bank, has 750 employees, some 30 of whom are involved in research. The Bank is located in Helsinki.*

The Bank of Finland welcomes applications from foreign and Finnish scholars for a post under the Bank's Visiting Scholars Programme at the Research Department. Scholarships for six months are available for faculty or post-doctoral level research projects in two main research areas:

- (1) The modelling of monetary policy
- (2) The future of the financial services sector.

In the area of monetary policy modelling, we are especially interested in incorporating the analysis of credibility and policy uncertainty in applied models that could be used to analyze monetary policy in practice. The second area aims at illuminating the ongoing structural transformation of the global financial services industry, as driven by electronification and increased competition in particular. This area of interest includes stability and other public policy aspects of this transformation.

A visiting scholar will be expected to conduct research based on a mutually agreed research plan. Articles stemming from the research are expected to be included in the Bank's Discussion Papers and may be published elsewhere as well.

A visiting scholar should normally also give a lecture at the Bank to an audience of economists on his or her research topic as well as interact with other researchers engaged in projects in the same area.

Remuneration for visiting scholars will be commensurate with their research experience.

Persons interested in applying are invited to send

- a brief research proposal concerning either of the two areas
- a CV specifying the applicant's academic and research background, with the names of two or three referees

to: Research Department  
Bank of Finland  
P.O.Box 160  
Helsinki, Finland  
Fax: +358 9 183 2560  
Email: Kaisa-Liisa.Nordman@bof.fi

Inquiries: Juha Tarkka, head, Research Department,  
phone +358 9 183 2581, email Juha.Tarkka@bof.fi  
or  
Jouko Vilmunen, research supervisor, Research Department,  
phone +358 9 183 2594, email Jouko.Vilmunen@bof.fi

# Finland in brief

## Land, climate and population

Finland covers an area of more than 338 000 square kilometres. The total area is slowly increasing because of the steady uplift of the land since the last glacial era. The country shares frontiers with Sweden in the west, Norway in the north and Russia in the east and has a coastline bordered by the Baltic Sea in the south and west. Agricultural land accounts for 8 % of the total area, forest and other wooded land for 68 % and inland waters for 10 %. Located between latitudes 60° and 70° north, Finland has warm summers and cold winters. Helsinki on the south coast has an average maximum temperature of 21° C (70° F) in July and -3° C (25° F) in February.

Finland has a population of 5 147 349 (31 December 1997) and an average population density of 17 per square kilometre. The largest towns are Helsinki (Helsingfors), the capital, with 539 363 inhabitants, Espoo (Esbo) 200 834, Tampere (Tammerfors) 188 726, Vantaa (Vanda) 171 297 and Turku (Åbo) 168 772.

There are two official languages: 93 % of the population speaks Finnish as its mother tongue and 5.7 % Swedish. There is a small Lapp population in the north. Finnish is a member of the small Finno-Ugrian group of languages, which also includes Estonian and Hungarian.

## Form of government

Finland is a parliamentary democracy with a republican constitution. From the twelfth century to 1809 Finland was part of the Kingdom of Sweden. In 1809, Finland was annexed to Russia as an autonomous Grand Duchy with the Tsar as Grand Duke. On 6 December 1917 Finland declared her independence. The republican constitution adopted in 1919 remains essentially unchanged today.

The legislative power of the country is exercised by Parliament and the President of the Republic. The supreme executive power is vested in the President, who is elected for a period of six years. The President for the current term, 1 March 1994 to 1 March 2000, is Mr Martti Ahtisaari.

Parliament, comprising 200 members, is elected by universal suffrage for a period of four years. Following the parliamentary elections of 1995, the seats of the various parties in Parliament are distributed as follows:

Social Democratic Party 63; Centre Party 44; National Coalition Party 39; Left Wing Alliance 22; Swedish People's Party 12; Green League 9; Christian League 7; Progressive Finnish Party 2; Rural Party 1; and Ecological Party 1.

Of the 18 ministerial posts in the present Government appointed in April 1995, 7 are held by the Social Democratic Party, 5 by the National Coalition Party, 2 by the Left Wing Alliance, 2 by the Swedish People's Party, 1 by the Green League and 1 by an expert with no party affiliation. The Prime Minister is Mr Paavo Lipponen of the Social Democratic Party.

Finland is divided into 452 self-governing municipalities. Members of the municipal council are elected by universal suffrage for a period of four years.

## International relations

Finland became a member of the BIS in 1930, the IMF in 1948, the IBRD in 1948, GATT in 1950, the UN in 1955, the Nordic Council in 1955, the IFC in 1956, IDA in 1960, EFTA in 1961, the ADB in 1966, the OECD in 1969, the IDB in 1977, the AfDB in 1982, the MIGA in 1988, the Council of Europe in 1989, the EBRD in 1991 and the EU in 1995.

Citizens of the five Nordic countries, Denmark, Finland, Iceland, Norway and Sweden, have enjoyed a common labour market, a passport union and reciprocal social security benefits since the mid-1950s.

Having abolished most quantitative restrictions on foreign trade in 1957, Finland first took part in European free trade arrangements under the auspices of EFTA in 1961. Imports from the USSR were also progressively freed from customs duties. Finland's free trade agreement with the EEC entered into force in 1974 and agreements for the removal of trade barriers were concluded with several eastern European countries as well. The agreement on the European Economic Area (EEA) between the member countries of EFTA and the European Union came into effect at the beginning of 1994. Finland became a member of the European Union on 1 January 1995. Finland and ten other EU countries will proceed to Stage Three of EMU in 1999.

## The economy

**Output and employment.** Of the gross domestic product of FIM 538 billion in basic values in 1997, 2 % was generated in agriculture and fishing, 3 % in forestry, 27 % in industry, 6 % in construction, 11 % in trade, restaurants and hotels, 9 % in transport and communications, 3 % in finance and insurance, 22 % in other private services and 18 % by producers of government services. Of total employment of 2.2 million persons in 1997, 7.0 % were engaged in primary production, 27.4 % in industry and construction and 65.6 % in services.

In 1997, expenditure on the gross domestic product in purchasers' values amounted to FIM 622 billion and was distributed as follows: net exports 9 % (exports 40 %, imports -31 %), gross fixed capital formation 17 %, private consumption 53 % and government consumption 21 %. Finland's tax ratio (gross taxes including compulsory employment pension contributions relative to GDP) was 47.0 per cent, which is somewhat below the average for the Nordic countries.

Average annual (compounded) growth of real GDP was 4.7 % in the period 1950-59, 5.0 % in 1960-69, 3.7 % in 1970-79, 3.7 % in 1980-89 and 3.6 % in 1990-96. Finland's GDP per capita in 1997 was USD 23 302.

**Foreign trade.** EU countries absorb the bulk of Finnish merchandise exports. In 1993-1997 their average share was 51.7 %. Over the same period, Finland's exports to other European countries (including Russia) accounted for 22.1 % and to the rest of the world for 26.2 %. The regional distribution of Finland's merchandise imports in the same period has been quite similar to that of

exports: EU countries accounted for 53.8 %, other European countries for 22.3 % and the rest of the world for 24.0 %.

In 1997, the share of forest industry products in total merchandise exports was 30.8 %, the share of metal and engineering products 43.3 % and the share of other goods 25.9 %. Raw materials and intermediate goods (incl. crude oil) accounted for 60.9 % of merchandise imports, fuels for 4.4 %, investment goods for 15 % and consumption goods for 21.9 %.

**Forest resources.** Finland has fairly abundant forest resources but only limited amounts of other raw materials. The growing stock comprises 1 937 million cubic metres, of which 46 % is pine, 36 % spruce, 15 % birch and 3 % other broad-leaved species.

According to the latest National Forest Inventory (1989–1994), the annual volume increment is about 75.4 million cubic metres. During the same time period, the average annual drain has been about 55 million cubic metres.

## **Finance and banking**

**Currency.** Finland has had its own monetary system since 1865. The currency unit is the markka (plural: markkaa), abbreviation FIM, which is divided into 100 penniä (singular: penni). From 1 November 1977 to 7 June 1991 the external value of the markka was officially expressed in terms of a trade-weighted currency index, which was permitted to fluctuate within a prescribed range (from 30 November 1988 the range was 6 percentage points). From 7 June 1991 to 7 September 1992, the markka was pegged to the European Currency Unit, the ECU. The fluctuation margins and the midpoint were set so as to correspond to the fluctuation margins and midpoint of the old currency index. The midpoint was first 4.87580 (FIM/ECU). Owing to the devaluation of the markka on 15 November 1991, the midpoint was increased to 5.55841 and the fluctuation limits to 5.39166 and 5.72516. On 8 September 1992, the fluctuation limits of the markka were abandoned and the markka was allowed to float. On 14 October 1996, the markka was joined to the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS) at the central rate of 5.80661 per ECU. As from 16 March 1998 the ECU central rate is FIM 6.01125.

**The Central Bank.** The two new laws adopted in 1997 and 1998 make Finnish legislation compatible with the requirements of the Treaty establishing the European Community and the Statute of the European System of Central Banks and the European Central Bank. The latter law, the new Act on the Bank of Finland, integrates the

Bank of Finland into the ESCB once Finland joins the euro area. In performing the tasks of the ESCB, the Bank of Finland will act in accord with guidelines and instructions issued by the ECB. Under the Treaty, the primary objective on the Bank of Finland is to maintain price stability. The new Act did not change the division of responsibilities between the Parliamentary Supervisory Council and the Board. The tasks of the Council are connected with supervision of the Bank's administration and operations, administrative decisions and certain other responsibilities. The Board of the Bank of Finland comprises the Chairman (Governor) and a maximum of five (currently three) other members, all of whom are appointed by the President of the Republic on a proposal of the Council. The Chairman of the Board is appointed for a seven-year term and the other members of the board each for a five-year term. The Bank of Finland has a head office in Helsinki and 4 branch offices in other towns.

**Other banks** ( 31 Dec 1997). Finland has three major groups of deposit banks with a total of 1 242 offices. There are two big commercial banks with national branch networks and five smaller ones. The commercial banks have a total of 10 foreign branches, subsidiaries and associate banks and 16 representative offices abroad. There are 40 savings banks and 294 cooperative banks, both with extensive branch networks. In addition, 6 foreign banks have branches and 7 foreign banks have representative offices in Finland.

**Financial markets.** Of the total stock of FIM 726 billion in outstanding domestic credit at end-September 1997, 48 % was accounted for by deposit banks, 6 % by insurance companies, 23 % by pension insurance institutions, 12 % by other credit institutions, and 11 % by state and local authorities and social security funds.

In the money market, 72 % of the instruments in value terms, which totalled about FIM 134 billion at end-December 1997, were accounted for by bank certificates of deposit (including central bank paper). Other negotiable money market instruments consist of Treasury bills, commercial paper and local authority paper.

At end-March 1998, there are 81 companies on the official list, 32 on the OTC list and 15 on the brokers list for the HEX, Helsinki Exchanges. Total market capitalization for the official list was FIM 518 billion, the OTC list FIM 6 billion, and the brokers list FIM 8 billion, at end-March 1998. Domestic bonds and debentures in circulation at end-March 1998 totalled FIM 289 billion; government bonds comprised 76 % of the total. Turnover on the HEX, Helsinki Exchanges amounted to FIM 187 billion in 1997. In January–March 1998 share turnover amounted to FIM 60 billion.

<b>1. The balance sheet of the Bank of Finland</b>	S2
1.1 The balance sheet of the Bank of Finland	S2
1.2 Time series for the balance sheet items of the Bank of Finland	S3
<b>2. The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position</b>	S4
2.1 The Bank of Finland's minimum reserve system and standing facilities	S4
2.2 The Bank of Finland's money market transactions	S4
2.3 The Bank of Finland's transactions in foreign currencies and the stock of reserve assets	S5
2.4 Forward exchange contracts	S5
<b>3. Rates of interest</b>	S6
3.1 Money market rates and rates applied by the Bank of Finland	S6
3.2 The Bank of Finland's liquidity facility	S6
3.3 Weighted Eurorates and commercial ECU interest rate	S6
3.4 Rates of interest applied by banks	S7
3.5 Yields on bonds and shares	S7
<b>4. Rates of exchange</b>	S8
4.1 Middle rates	S8
4.2 Markka value of the ECU and currency indices	S9
4.3 Deviations of ERM currencies' markka rates from central rates	S9
<b>5. Financial markets and money supply</b>	S10
5.1 Bank funding from the public	S10
5.2 Bank lending to the public	S10
5.3 Money supply	S11
5.4 Liabilities and assets of the central government	S11
5.5 Markka bond market	S12
a) Issues	S12
b) Stock	S12
c) Turnover	S13
5.6 Helsinki Stock Exchange	S13
<b>6. Balance of payments, foreign liabilities and assets</b>	S14
6.1 Current account	S14
6.2 Capital and financial account	S15
6.3 Finland's international investment position	S16
6.4 Finland's net international investment position (liabilities less assets), by sector	S17
<b>7. Foreign trade</b>	S18
7.1 Exports, imports and the trade balance	S18
7.2 Foreign trade: indices of volume, prices and terms of trade	S18
7.3 Foreign trade by main groups	S18
7.4 Foreign trade by regions and countries	S19
<b>8. Domestic economic developments</b>	S20
8.1 Supply and use of resources	S20
8.2 Volume of industrial production	S20
8.3 Indicators of domestic supply and demand	S21
8.4 Wages and prices	S22
8.5 Labour, employment and unemployment	S23
8.6 Central government finances: revenue, expenditure and financial balance	S24
<b>Notes and explanations to the statistical section</b>	S25

# 1. The balance sheet of the Bank of Finland

## 1.1 The balance sheet of the Bank of Finland, mill. FIM

	1997		1998		
	31 Dec	8 Jul	15 Jul	23 Jul	31 Jul
<b>ASSETS</b>					
<b>Reserve assets</b>	51 455	51 885	53 385	53 205	52 753
Gold	1 742	1 742	1 742	1 742	1 742
Special drawing rights	1 772	1 715	1 700	1 691	1 664
IMF reserve tranche	3 036	3 589	3 558	3 543	3 521
ECU-claim on the European Monetary Institute	4 078	2 731	2 922	2 921	2 917
Foreign exchange assets	40 827	42 110	43 464	43 309	42 910
<b>Other foreign claims</b>	3 342	3 152	3 150	3 150	3 147
Markka subscription to Finland's quota in the IMF	3 281	2 731	2 731	2 731	2 728
European Central Bank capital share <sup>1)</sup>	61	421	419	419	419
<b>Claims on financial institutions</b>	2 951	5 100	818	818	2 826
Liquidity credits	—	—	—	—	—
Securities with repurchase commitments	—	4 984	703	703	2 711
Term credits	—	—	—	—	—
Bonds	114	77	77	77	77
Other	2 837	39	39	39	39
<b>Claims on the public sector</b>	2 015	2 026	2 026	2 026	2 026
Treasury bills	—	—	—	—	—
Bonds	—	—	—	—	—
Total coinage	2 015	2 026	2 026	2 026	2 026
Other	—	—	—	—	—
<b>Claims on corporations</b>	1 762	1 620	1 620	1 620	1 620
Financing of domestic deliveries (KTR)	26	14	14	14	14
Other	1 736	1 606	1 606	1 606	1 606
<b>Other assets</b>	635	557	492	530	552
Accrued items	528	457	398	438	455
Other	107	101	94	92	97
<b>Valuation account</b>	—	—	—	—	—
<b>Total</b>	<b>62 159</b>	<b>64 340</b>	<b>61 491</b>	<b>61 348</b>	<b>62 924</b>
<b>LIABILITIES</b>					
<b>Foreign liabilities</b>	4 911	4 143	4 149	4 194	4 196
Allocations of special drawing rights	1 046	1 046	1 037	1 033	1 026
IMF markka accounts	3 281	2 731	2 731	2 731	2 729
Other	584	366	382	431	441
<b>Notes and coin in circulation</b>	17 817	16 981	16 965	17 123	17 178
Notes	15 923	15 087	15 064	15 219	15 271
Coin	1 894	1 894	1 901	1 904	1 906
<b>Certificates of deposit</b>	10 500	16 150	15 400	13 600	16 900
<b>Liabilities to financial institutions</b>	10 681	7 655	5 964	7 542	6 131
Reserve deposits	7 911	7 655	5 964	7 542	6 131
Term deposits	—	—	—	—	—
Other	2 770	0	0	0	0
<b>Liabilities to the public sector</b>	—	—	—	—	—
Current accounts	—	—	—	—	—
Other	—	—	—	—	—
<b>Liabilities to corporations</b>	32	12	12	12	12
Deposits for investment and ship purchase	32	12	12	12	12
Other	—	—	—	—	—
<b>Other liabilities</b>	55	69	67	81	78
Accrued items	23	11	32	48	44
Other	32	58	35	33	35
<b>Valuation account</b>	258	1 426	1 029	892	525
<b>Provisions</b>	12 140	12 140	12 140	12 140	12 140
Pension provision	1 601	1 601	1 601	1 601	1 601
Other	10 540	10 540	10 540	10 540	10 540
<b>Capital accounts</b>	5 764	5 764	5 764	5 764	5 764
Primary capital	5 000	5 000	5 000	5 000	5 000
Reserve fund	764	764	764	764	764
Net earnings	—	—	—	—	—
<b>Total</b>	<b>62 159</b>	<b>64 340</b>	<b>61 491</b>	<b>61 348</b>	<b>62 924</b>

<sup>1)</sup> Until 1 July 1998 Share in the European Monetary Institute.

## 1.2 Time series for the balance sheet items of the Bank of Finland, mill. FIM

End of period	Foreign sector								Public sector		
	Gold	Special drawing rights	IMF reserve tranche	ECU-claim on the European Monetary Institute	Foreign exchange assets	Reserve assets (1+2+3+4+5)	Other claims, net	Net claims (6+7)	Claims	Liabilities	Net claims (9-10)
	1	2	3	4	5	6	7	8	9	10	11
1993	2 180	664	1 747	.	28 882	33 473	-1 324	32 148	1 788	784	1 004
1994	2 180	1 537	1 354	.	47 672	52 743	-1 114	51 629	1 806	93	1 713
1995	1 742	1 569	1 685	3 363	40 506	48 865	-2 082	46 783	1 882	75	1 807
1996	1 742	1 344	1 953	2 541	28 817	36 397	-1 826	34 571	1 906	-	1 906
1997	1 742	1 772	3 036	4 078	40 827	51 455	-1 569	49 886	2 015	-	2 015
1997											
Jul	1 742	1 557	2 023	3 965	55 189	64 475	-1 533	62 942	1 921	-	1 921
Aug	1 742	1 711	2 031	3 978	54 008	63 470	-1 622	61 848	1 926	-	1 926
Sep	1 742	1 588	2 081	3 958	52 686	62 055	-1 750	60 305	1 939	-	1 939
Oct	1 742	1 489	2 068	4 031	54 754	64 085	-1 941	62 144	1 947	-	1 947
Nov	1 742	1 234	2 271	4 071	41 920	51 238	-2 256	48 982	1 955	-	1 955
Dec	1 742	1 772	3 036	4 078	40 827	51 455	-1 569	49 886	2 015	-	2 015
1998											
Jan	1 742	1 323	3 065	3 310	40 268	49 709	-1 389	48 320	2 019	-	2 019
Feb	1 742	1 230	3 389	3 318	38 830	48 510	-1 413	47 097	2 020	-	2 020
Mar	1 742	1 680	3 399	3 334	34 412	44 567	-1 362	43 205	2 017	-	2 017
Apr	1 742	1 558	3 351	2 727	37 034	46 414	-1 611	44 803	2 019	-	2 019
May	1 742	1 203	3 541	2 721	39 418	48 626	-1 414	47 212	2 024	-	2 024
Jun	1 742	1 714	3 588	2 735	42 171	51 950	-1 472	50 478	2 026	-	2 026
Jul	1 742	1 664	3 521	2 917	42 910	52 753	-1 049	51 704	2 026	-	2 026

End of period	Domestic financial sector				Corporate sector				
	Term claims on deposit banks, net	Reserve deposits of deposit banks	Other claims on financial institutions, net	Net claims (12+13+14)	Claims in the form of special financing	Special deposits and other items, net	Net claims (16+17)	Notes and coin in circulation	Out-standing CDs issued by the Bank of Finland
	12	13	14	15	16	17	18	19	20
1993	7 337	-6 398	-463	476	496	720	1 216	14 994	14 837
1994	1 480	-6 526	-347	-5 392	316	1 285	1 601	14 315	35 236
1995	7 076	-15 676	655	-7 945	185	1 706	1 891	15 611	27 090
1996	11 626	-6 829	372	5 169	70	1 623	1 692	16 891	15 530
1997	-	-7 911	181	-7 730	26	1 704	1 730	17 817	10 500
1997									
Jul	10 575	-3 651	252	7 176	42	1 712	1 754	16 359	40 170
Aug	8 225	-12 522	252	-4 045	37	1 748	1 785	16 287	28 440
Sep	9 214	-4 458	226	4 982	33	1 767	1 800	16 046	36 760
Oct	15 103	-13 983	188	1 308	26	1 792	1 819	16 144	34 900
Nov	4 411	-11 612	184	-7 017	26	1 684	1 710	16 381	12 200
Dec	-	-7 911	181	-7 730	26	1 704	1 730	17 817	10 500
1998									
Jan	1 929	-5 642	157	-3 556	26	1 713	1 739	16 416	13 740
Feb	3 648	-10 365	155	-6 562	21	1 715	1 736	16 274	9 360
Mar	-	-8 417	153	-8 264	18	1 718	1 736	16 190	3 100
Apr	-	-6 255	132	-6 123	14	1 723	1 737	16 845	6 900
May	1 962	-5 089	132	-2 995	14	1 593	1 607	16 909	12 820
Jun	5 286	-8 326	117	-2 923	14	1 594	1 608	16 932	15 350
Jul	2 711	-6 131	116	-3 304	14	1 594	1 608	17 178	16 900

## 2. The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position

### 2.1 The Bank of Finland's minimum reserve system and standing facilities

	Reserve requirement			Required reserves <sup>1</sup> , mill. FIM	Excess reserves, mill. FIM	Total reserves, mill. FIM (4+5)	Liquidity credits, mill. FIM
	On deposits payable on demand, %	On other deposits, %	On other items, %				
	1	2	3	4	5	6	7
1993	2.0	1.5	1.0	6 398	.	.	440
1994	2.0	1.5	1.0	6 526	.	.	14
1995	I-IX X-XII	2.0	1.5	6 557	.	.	123
1996		2.0	1.5	6 530	616	7 146	37
1997		2.0	1.5	6 652	440	7 092	121
		2.0	1.5	6 717	747	7 464	1
1997							
Jul	2.0	1.5	1.0	6 777	378	7 155	-
Aug	2.0	1.5	1.0	6 803	626	7 429	-
Sep	2.0	1.5	1.0	6 769	521	7 290	-
Oct	2.0	1.5	1.0	6 799	1 020	7 818	-
Nov	2.0	1.5	1.0	6 911	892	7 803	-
Dec	2.0	1.5	1.0	6 999	310	7 309	-
1998							
Jan	2.0	1.5	1.0	6 995	321	7 317	-
Feb	2.0	1.5	1.0	6 947	147	7 095	-
Mar	2.0	1.5	1.0	6 947	895	7 842	0
Apr	2.0	1.5	1.0	6 866	198	7 065	-
May	2.0	1.5	1.0	6 834	1 197	8 031	3
Jun	2.0	1.5	1.0	6 918	179	7 098	-
Jul	2.0	1.5	1.0	6 985	115	7 100	-

<sup>1</sup> As of 2 October 1995, the minimum reserve requirement is fulfilled on an averaging basis; until 2 October 1995, end of month figures.

### 2.2 The Bank of Finland's money market transactions, mill. FIM

During period	Purchases of money market instruments	Sales of money market instruments	Matured money market instruments, net	Money market transactions, net (1-2-3)
	1	2	3	4
1993	86 521	146 899	-50 486	-9 892
1994	35 540	351 820	-295 165	-21 115
1995	50 435	434 810	-393 930	9 555
1996	94 080	250 980	-190 562	33 662
1997	128 220	422 500	-294 770	490
1997				
Jul	10 420	36 520	-22 950	-3 150
Aug	8 350	30 260	-26 320	4 410
Sep	12 300	34 630	-23 120	790
Oct	12 200	36 900	-28 830	4 130
Nov	11 400	15 700	-18 480	14 180
Dec	0	22 430	-26 110	3 680
1998				
Jan	2 000	30 040	-27 770	-270
Feb	4 280	23 540	-19 260	0
Mar	0	7 000	-9 610	2 610
Apr	0	10 400	-7 850	-2 550
May	2 000	17 870	-10 650	-5 220
Jun	5 350	25 365	-20 365	350
Jul	3 750	37 300	-29 970	-3 580



### 2.3 The Bank of Finland's transactions in foreign currencies and the stock of reserve assets, mill FIM

During period	Intervention in the foreign exchange market			Spot transactions related to forward contracts, net	Central government's foreign exchange transactions, net	Reserve assets (end of period)	
	Spot purchases	Spot sales	Forward exchange intervention = change in forward exchange position			mill. FIM	mill. USD
	1	2	3	4	5	6	7
1993	25 120	-45 080	7 460	-6 910	33 240	29 517	5 628
1994	20 930	-12 900	9 060	-8 930	24 660	33 473	5 787
1995	4 910	-5 470	-6 170	9 170	-10 135	52 743	11 120
1996	7 360	-7 320	-	-	-13 868	48 865	11 211
1997	47 620	-1 470	-	4 310	-37 540	36 397	7 838
1997							
Jul	4 940	-	-1 310	6 300	-3 560	64 475	11 807
Aug	-	-	-70	-	-670	63 470	11 784
Sep	-	-	-70	-	-1 240	62 055	11 707
Oct	-	-	-3 160	3 100	-800	64 085	12 342
Nov	-	-	-1 560	1 560	-15 300	51 238	9 602
Dec	-	-	-	-	-610	51 455	9 492
1998							
Jan	-	-	-	-	-2 730	49 709	8 974
Feb	-	-	-	-	-1 410	48 510	8 825
Mar	5 330	-	2 800	-2 780	-6 590	44 567	7 950
Apr	4 860	-	-620	-540	-1 280	46 414	8 529
May	-	-	7 040	-8 060	8 250	48 626	8 970
Jun	-	-	-3 730	-3 790	-130	51 950	9 458
Jul	-	-	-	-	-	52 753	9 743

### 2.4 Forward exchange contracts between Finnish markka and other currencies, mill. FIM

Stock at end of period	Finnish banks' forward contracts						Non-residents' forward contracts with Finnish customers (excl. Finnish banks)			The Bank of Finland's forward contracts	
	With Finnish customers (excl. Finnish banks)			With foreign customers			Total	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net	Net currency sales
	Currency purchases from Finnish customers	Currency sales to Finnish customers	Net	Currency purchases from foreign customers	Currency sales to foreign customers	Net					
	1	2	3	4	5	6	7	8	9	10	11
1993	38 373	23 721	14 652	14 346	21 895	-7 548	7 104	11 632	2 173	9 459	1 939
1994	51 096	22 093	29 003	19 236	32 791	-13 555	15 448	18 372	4 780	13 592	-6 080
1995	60 280	19 095	41 185	31 837	48 906	-17 069	24 116	12 829	6 871	5 957	-
1996	53 520	21 793	31 726	44 068	72 021	-27 953	3 773	15 871	6 908	8 963	-
1997	66 649	37 507	29 142	105 128	127 793	-22 665	6 477	23 490	14 552	8 938	-
1997											
Jun	65 886	30 056	35 830	58 688	83 157	-24 468	11 362	24 007	12 681	11 326	-5 589
Jul	71 933	31 074	40 859	55 146	83 978	-28 831	12 028	30 797	14 976	15 821	-4 690
Aug	74 387	33 124	41 263	60 935	99 872	-38 936	2 327	28 558	17 323	11 235	-4 690
Sep	69 721	36 411	33 310	68 654	93 287	-24 632	8 678	24 439	16 998	7 441	-4 690
Oct	68 258	37 917	30 340	92 393	116 191	-23 798	6 542	24 034	19 297	4 737	-1 578
Nov	68 813	36 778	32 035	93 566	115 303	-21 737	10 298	28 528	17 234	11 294	-
Dec	66 649	37 507	29 142	105 128	127 793	-22 665	6 477	23 490	14 552	8 938	-
1998											
Jan	66 113	32 546	33 568	95 925	116 620	-20 695	12 873	19 041	7 592	11 449	-
Feb	70 214	32 074	38 140	91 570	118 695	-27 125	11 015	22 024	6 215	15 809	-
Mar	67 157	33 100	34 057	96 525	121 046	-24 521	9 536	19 762	6 366	13 396	-2 766
Apr	61 717	36 202	25 516	90 097	109 915	-19 818	5 698	22 235	5 892	16 344	-2 211
May	60 290	29 129	31 161	93 234	112 666	-19 432	11 729	21 843	5 825	16 018	-9 150
Jun	60 173	30 487	29 686	81 673	102 646	-20 972	8 714	21 293	4 791	16 502	-5 382

### 3. Rates of interest

#### 3.1 Money market rates and rates applied by the Bank of Finland, per cent

Average of daily observations	Interbank overnight rate	HELIBOR				Bank of Finland rates		
		1 month	3 months	6 months	12 months	Liquidity credit rate	Excess-reserve rate <sup>1</sup>	Base rate
		1	2	3	4	5	6	7
1993	7.71	7.85	7.73	7.59	7.47	8.95	4.95	6.85
1994	4.38	5.11	5.35	5.78	6.33	7.11	3.11	5.27
1995	5.26	5.63	5.76	5.97	6.34	7.63	3.63	5.20
1996	3.66	3.58	3.63	3.74	3.99	5.57	1.57	4.38
1997	2.87	3.10	3.23	3.41	3.69	5.07	1.07	4.00
1997								
Jul	2.85	3.00	3.08	3.22	3.50	5.00	1.00	4.00
Aug	3.02	3.01	3.13	3.31	3.68	5.00	1.00	4.00
Sep	3.06	3.15	3.31	3.52	3.89	5.14	1.14	4.00
Oct	2.75	3.29	3.57	3.91	4.26	5.25	1.25	4.00
Nov	2.90	3.35	3.65	4.00	4.32	5.25	1.25	4.00
Dec	3.20	3.31	3.60	3.87	4.18	5.25	1.25	4.00
1998								
Jan	2.80	3.30	3.48	3.63	3.86	5.25	1.25	4.00
Feb	3.18	3.29	3.42	3.56	3.74	5.25	1.25	4.00
Mar	3.10	3.36	3.47	3.58	3.76	5.31	1.31	4.00
Apr	3.30	3.50	3.63	3.75	3.93	5.40	1.40	4.00
May	3.20	3.57	3.75	3.86	4.04	5.40	1.40	4.00
Jun	3.48	3.54	3.73	3.83	3.99	5.40	1.40	4.00
Jul	3.51	3.51	3.67	3.76	3.92	5.40	1.40	4.00

<sup>1</sup> Call money deposit rate until 2 October 1995.

#### 3.2 The Bank of Finland's liquidity facility

	The Bank of Finland's tender rate, %	Liquidity credit: interest rate margin, %-points	Liquidity credit: maturity, days	Call money deposits: interest rate margin, %-points	Excess-reserve rate	
	1	2	3	4	5	
1993	7.87	1993	+2.00	7	-2.00	.
1994	5.11	1994	+2.00	7	-2.00	.
1995	5.63	1995	+2.00	7	.	2.25
1996	3.57	1996	+2.00	7	.	1.00
1997	3.07	1997	+2.00	1	.	1.25
1997		1997				
Jul	3.00	Jul	+2.00	7	.	1.00
Aug	3.00	Aug	+2.00	7	.	1.00
Sep	3.14	Sep	+2.00	7	.	1.25
Oct	3.25	Oct	+2.00	7	.	1.25
Nov	3.25	Nov	+2.00	1	.	1.25
Dec	3.25	Dec	+2.00	1	.	1.25
1998		1998				
Jan	3.25	Jan	+2.00	1	.	1.25
Feb	3.25	Feb	+2.00	1	.	1.25
Mar	3.31	Mar	+2.00	1	.	1.40
Apr	3.40	Apr	+2.00	1	.	1.40
May	3.40	May	+2.00	1	.	1.40
Jun	3.40	Jun	+2.00	1	.	1.40
Jul	3.40	Jul	+2.00	1	.	1.40
13.3.1996	3.75	13.3.1996				1.75
14.6.1996	3.60	14.6.1996				1.60
5.7.1996	3.50	5.7.1996				1.50
23.8.1996	3.25	23.8.1996				1.25
18.9.1996	3.10	18.9.1996				1.10
9.10.1996	3.00	9.10.1996				1.00
15.9.1997	3.25	15.9.1997				1.25
19.3.1998	3.40	19.3.1998				1.40

#### 3.3 Weighted Eurorates and commercial ECU interest rate, per cent

Average of daily observations	ECU	3 currencies	Commercial ECU
	3 months		
	1	2	3
1993	8.0	5.9	8.1
1994	5.9	5.2	6.1
1995	5.9	5.2	6.0
1996	4.4	4.3	4.4
1997	4.3	4.4	4.3
1997			
Jul	4.2	4.3	4.2
Aug	4.3	4.4	4.4
Sep	4.3	4.5	4.3
Oct	4.5	4.6	4.5
Nov	4.6	4.8	4.6
Dec	4.5	4.8	4.5
1998			
Jan	4.4	4.6	4.3
Feb	4.4	4.6	4.4
Mar	4.3	4.6	4.3
Apr	4.3	4.6	4.3
May	4.3	4.6	4.4
Jun	4.3	4.6	4.4
Jul	4.3	4.6	4.4

### 3.4 Rates of interest applied by banks, per cent

Average for period	Lending						Markka deposits and other markka funding					
	New credits				Average lending rate	Of which: Commercial banks	24-month tax-exempt deposits <sup>1</sup>	36-month tax-exempt deposits <sup>1</sup>	Other tax-exempt deposits, max. rate of interest <sup>1</sup>	Average rate of interest on deposits	Average rate of interest on other funding	Average rate of interest on markka funding
	Cheque account and postal giro credits	Bills of exchange	Loans	New lending, total								
	1	2	3	4	5	6	7	8	9	10	11	12
1993	9.69	13.55	9.40	9.75	10.20	9.92	3.50	4.50	2.00	4.78	8.86	6.15
1994	7.32	11.55	7.13	7.35	8.18	7.91	3.25	4.25	2.00	2.99	5.96	4.01
1995	7.85	11.33	7.30	7.46	8.04	7.75	2.75	3.75	2.00	3.13	6.29	4.08
1996	5.61	9.61	5.31	5.43	6.49	6.15	2.00	3.00	2.00	2.15	4.31	2.78
1997	4.83	9.66	4.73	4.81	5.64	5.29	.	.	2.00	1.47	..	..
1997												
Jun	5.46	9.31	4.84	4.93	5.59	5.24	2.00	.	2.00	1.43	..	..
Jul	5.45	9.69	4.43	4.53	5.57	5.21	2.00	.	2.00	1.42	..	..
Aug	4.17	9.77	4.75	4.80	5.54	5.18	2.00	.	2.00	1.42	..	..
Sep	4.99	9.42	4.69	4.77	5.57	5.22	2.00	.	2.00	1.42	..	..
Oct	4.08	9.70	4.95	4.97	5.61	5.27	2.00	.	2.00	1.44	..	..
Nov	6.06	9.52	4.98	5.08	5.67	5.35	2.00	.	2.00	1.43	..	..
Dec	6.07	9.21	4.74	4.83	5.74	5.43	.	.	2.00	1.44	..	..
1998												
Jan	4.54	9.58	4.75	4.80	5.71	5.41	.	.	2.00	1.44	..	..
Feb	5.43	9.26	4.75	4.84	5.71	5.40	.	.	2.00	1.43	..	..
Mar	5.91	9.23	4.74	4.83	5.60	5.34	.	.	2.00	1.37 <sup>r</sup>	..	..
Apr	5.81	9.21	4.82	4.89	5.60	5.34	.	.	2.00	1.37	..	..
May	6.28	9.09	4.91	4.98	5.60	5.34	.	.	2.00	1.35	..	..
Jun	6.00	9.12	4.86	4.93	5.61	5.36	.	.	2.00	1.37	..	..

<sup>1</sup> End of period.

### 3.5 Yields on bonds and shares, per cent

Period	Bonds				Shares
	Reference rates calculated by the Bank of Finland		Taxable government bonds		Share yield
	3 years	5 years	5 years	10 years	
	1	2	3	4	5
1993	8.5	8.9	8.2	8.8	1.2
1994	8.5	9.3	8.4	9.1	1.0
1995	8.2	8.9	7.9	8.8	2.4
1996	5.8	6.8	6.0	7.1	2.1
1997	5.0	5.7	4.9	6.0	2.0
1997					
Jun	4.9	5.7	4.8	6.1	2.1
Jul	4.9	5.6	4.7	5.9	2.0
Aug	5.0	5.7	4.9	5.9	2.0
Sep	5.2	5.8	4.9	5.8	2.0
Oct	5.3	5.9	5.1	5.7	1.9
Nov	5.4	5.9	5.1	5.8	2.0
Dec	5.2	5.8	4.8	5.6	2.0
1998					
Jan	5.0	5.5	4.6	5.3	1.8
Feb	4.9	5.4	4.5	5.2	2.0
Mar	4.9	5.4	4.4	5.0	2.5
Apr	4.9	5.4	4.5	5.0	2.4
May	4.9	5.5	4.6	5.1	2.4
Jun	4.9	5.4	4.5	5.0	2.5

## 4. Rates of exchange

### 4.1 Middle rates, FIM

Average of daily quotations	New York	Montreal	London	Dublin	Stockholm	Oslo	Copenhagen	Reykjavik	Frankfurt am Main	Amsterdam	Brussels	Zurich
	1 USD	1 CAD	1 GBP	1 IEP	1 SEK	1 NOK	1 DKK	1 ISK	1 DEM	1 NLG	1 BEF	1 CHF
	1	2	3	4	5	6	7	8	9	10	11	12
1993	5.7189	4.434	8.582	8.371	0.7350	0.8059	0.8822	0.0846	3.4584	3.0787	0.1655	3.8706
1994	5.2184	3.824	7.982	7.799	0.6758	0.7393	0.8207	0.0745	3.2169	2.8684	0.1561	3.8179
1995	4.3658	3.181	6.891	6.999	0.6123	0.6889	0.7790	0.0674	3.0471	2.7202	0.1481	3.6941
1996	4.5905	3.367	7.164	7.345	0.6847	0.7111	0.7921	0.0689	3.0530	2.7247	0.1484	3.7211
1997	5.1944	3.753	8.506	7.871	0.6799	0.7339	0.7859	0.0732	2.9939	2.6603	0.1451	3.5785
1997												
Jul	5.3051	3.854	8.869	7.942	0.6793	0.7134	0.7783	0.0747	2.9641	2.6325	0.1436	3.5832
Aug	5.5097	3.967	8.838	8.004	0.6891	0.7221	0.7850	0.0759	2.9903	2.6550	0.1448	3.6380
Sep	5.3561	3.862	8.571	7.931	0.6954	0.7318	0.7862	0.0747	2.9932	2.6579	0.1450	3.6364
Oct	5.2695	3.803	8.595	7.730	0.6958	0.7444	0.7874	0.0737	2.9981	2.6613	0.1454	3.6278
Nov	5.2205	3.696	8.809	7.844	0.6902	0.7395	0.7916	0.0735	3.0130	2.6731	0.1461	3.7093
Dec	5.3714	3.768	8.925	7.830	0.6899	0.7413	0.7934	0.0749	3.0220	2.6817	0.1465	3.7327
1998												
Jan	5.4948	3.815	8.988	7.599	0.6858	0.7333	0.7946	0.0755	3.0268	2.6859	0.1467	3.7261
Feb	5.5022	3.835	9.018	7.573	0.6812	0.7282	0.7958	0.0760	3.0328	2.6908	0.1470	3.7570
Mar	5.5420	3.913	9.203	7.584	0.6956	0.7311	0.7962	0.0764	3.0348	2.6927	0.1471	3.7242
Apr	5.5063	3.854	9.205	7.651	0.7039	0.7312	0.7960	0.0764	3.0356	2.6957	0.1471	3.6565
May	5.3917	3.732	8.830	7.650	0.7009	0.7242	0.7975	0.0756	3.0391	2.6970	0.1473	3.6485
Jun	5.4430	3.717	8.973	7.659	0.6891	0.7192	0.7979	0.0763	3.0394	2.6966	0.1473	3.6460
Jul	5.4649	3.681	8.984	7.645	0.6841	0.7168	0.7977	0.0764	3.0396	2.6966	0.1474	3.6101

Average of daily quotations	Paris	Rome	Vienna	Lisbon	Madrid	Athens	Tallinn	Tokyo	Melbourne	Seoul	ECU Commercial	SDR
	1 FRF	1 ITL	1 ATS	1 PTE	1 ESP	1 GRD	1 EEK	1 JPY	1 AUD	1 KRW	1 XEU	1 XDR
	13	14	15	16	17	18	19	20	21	22	23	24
1993	1.0096	0.00364	0.4916	0.0356	0.0451	0.025	0.4323	0.05168	3.885	.	6.685	7.98671
1994	0.9406	0.00324	0.4573	0.0314	0.0390	0.0215	0.4021	0.05106	3.814	.	6.175	7.46629
1995	0.8748	0.00268	0.4331	0.0291	0.0350	0.0189	0.3809	0.04663	3.238	.	5.644	6.61879
1996	0.8978	0.00298	0.4340	0.0298	0.0363	0.0191	0.3816	0.04225	3.593	.	5.751	6.66357
1997	0.8894	0.00305	0.4255	0.0296	0.0355	0.0190	0.3742	0.04303	3.859	.	5.864	7.14420
1997												
Jul	0.8785	0.00304	0.4213	0.0293	0.0351	0.0189	0.3705	0.04609	3.939	0.00596	5.846	7.30859
Aug	0.8873	0.00306	0.4250	0.0295	0.0354	0.0191	0.3738	0.04672	4.085	0.00614	5.886	7.45951
Sep	0.8904	0.00307	0.4254	0.0295	0.0355	0.0190	0.3741	0.04434	3.876	0.00589	5.872	7.28131
Oct	0.8936	0.00306	0.4260	0.0294	0.0355	0.0190	0.3748	0.04355	3.800	0.00569	5.891	7.21962
Nov	0.9000	0.00308	0.4281	0.0295	0.0357	0.0192	0.3766	0.04172	3.630	0.00507	5.961	7.17348
Dec	0.9028	0.00308	0.4295	0.0296	0.0357	0.0192	0.3777	0.04152	3.562	0.00368	5.980	7.27353
1998												
Jan	0.9038	0.00308	0.4303	0.0296	0.0357	0.0192	0.3784	0.04253	3.611	0.00325	5.978	7.38238
Feb	0.9048	0.00307	0.4311	0.0296	0.0358	0.0192	0.3791	0.04377	3.711	0.00340	5.989	7.42807
Mar	0.9053	0.00308	0.4314	0.0297	0.0358	0.0182	0.3794	0.04298	3.712	0.00373	6.018	7.44954
Apr	0.9055	0.00307	0.4315	0.0296	0.0357	0.0174	0.3794	0.04169	3.592	0.00397	6.017	7.39411
May	0.9063	0.00308	0.4319	0.0297	0.0358	0.0176	0.3799	0.03995	3.396	0.00385	5.986	7.24735
Jun	0.9066	0.00309	0.4320	0.0297	0.0358	0.0179	0.3799	0.03873	3.283	0.00390	6.003	7.25578
Jul	0.9067	0.00308	0.4321	0.0297	0.0358	0.0182	0.3799	0.03887	3.378	0.00423	6.007	7.27034

## 4.2 Markka value of the ECU and currency indices

Average of daily observations	Markka value of the ECU FIM/ECU	Currency indices, 1982=100	
		Trade-weighted currency index	Payments currency index
	1	2	3
1993	6.69420	132.4	136.0
1994	6.19108	123.2	125.5
1995	5.70936	111.6	111.6
1996	5.83028	115.3	115.8
1997	5.88125	118.4	122.6
1997			
Jul	5.86447	119.0	123.8
Aug	5.90587	120.4	126.4
Sep	5.89038	119.5	124.7
Oct	5.89974	119.4	123.9
Nov	5.94676	119.4	123.7
Dec	5.97130	119.5	125.4
1998			
Jan	5.98008	120.1	126.7
Feb	5.98982	120.4	126.8
Mar	6.00921	121.3	127.6
Apr	6.00867	121.2	127.3
May	5.98172	119.9	125.6
Jun	5.99629	119.6	126.0
Jul	5.99793	119.6	126.1

## 4.3 Deviations of ERM currencies' markka rates from central rates, per cent

Average of daily observations	ECU	DEM	FRF	NLG	DKK	BEF	ESP	ATS	PTE	IEP	ITL	GRD
Central rate as of												
16 Mar 1998	6.01125	3.04001	0.906420	2.69806	0.796976	0.147391	0.0357345	0.432094	0.0296571	7.54951	0.00307071	0.0168382
	1	2	3	4	5	6	7	8	9	10	11	12
1995	-1.69	0.23	-3.48	0.82	-2.25	0.49	-2.02	0.24	-1.84	-4.52	..	..
1996	0.30	0.43	-0.95	0.99	-0.61	0.65	1.49	0.44	0.40	0.21	-3.07	..
1997	0.46	-1.52	-1.88	-1.40	-1.39	-1.56	-0.78	-1.53	-0.12	7.38	-0.72	..
1997												
Jul	0.17	-2.50	-3.08	-2.43	-2.35	-2.58	-1.65	-2.50	-1.04	8.36	-0.86	..
Aug	0.88	-1.64	-2.11	-1.60	-1.50	-1.74	-0.92	-1.65	-0.47	9.20	-0.30	..
Sep	0.62	-1.54	-1.77	-1.49	-1.36	-1.62	-0.73	-1.56	-0.59	8.20	-0.11	..
Oct	0.78	-1.38	-1.41	-1.36	-1.20	-1.38	-0.63	-1.40	-0.75	5.47	-0.29	..
Nov	1.58	-0.89	-0.71	-0.92	-0.67	-0.89	-0.18	-0.92	-0.46	7.02	0.14	..
Dec	2.00	-0.59	-0.40	-0.61	-0.45	-0.62	0.03	-0.59	-0.26	6.83	0.40	..
1998												
Jan	2.15	-0.43	-0.28	-0.45	-0.29	-0.45	-0.07	-0.42	-0.21	3.68	0.16	..
Feb	2.32	-0.24	-0.18	-0.27	-0.15	-0.30	0.13	-0.24	-0.14	3.32	0.09	..
Mar	1.18	-0.17	-0.12	-0.20	-0.10	-0.19	0.17	-0.17	-0.01	1.81	0.36	..
Apr	-0.04	-0.15	-0.10	-0.09	-0.12	-0.18	0.02	-0.15	-0.14	1.35	0.06	3.46
May	-0.49	-0.03	-0.01	-0.04	0.07	-0.06	0.18	-0.04	0.13	1.33	0.30	4.31
Jun	-0.25	-0.02	0.02	-0.05	0.12	-0.04	0.17	-0.03	0.13	1.46	0.55	6.36
Jul	-0.22	-0.01	0.03	-0.06	0.09	0.00	0.20	0.00	0.12	1.26	0.39	8.32

## 5. Financial markets and money supply

### 5.1 Bank funding from the public, mill. FIM

End of period	Tax-exempt				Subject to withholding tax			Other taxable			Markka deposits, total (4+7+10)	Foreign currency deposits (12)	Other markka funding (13)	Total funding (11+12+13)
	Cheque and trans- actions accounts (1)	Time deposits (2)	Other deposits (3)	Total (1+2+3) (4)	Cheque and trans- actions accounts (5)	Other deposits (6)	Total (5+6) (7)	Cheque and trans- actions accounts (8)	Other deposits (9)	Total (8+9) (10)				
1993	88 881	66 361	1 457	156 699	10 360	51 943	62 303	32 098	17 664	49 762	268 764	15 788	62 599	347 151
1994	96 796	63 329	1 895	162 021	9 467	47 908	57 375	37 279	18 739	56 018	275 414	13 332	58 067	346 813
1995	106 997	63 599	2 611	173 207	10 916	45 529	56 445	45 558	16 163	61 721	291 373	14 843	50 675	356 891
1996	132 113	29 672	27 140	188 926	10 746	25 207	35 953	48 329	10 438	58 767	283 646	12 495	55 046	351 187
1997*	140 891	46 976	19 119	206 985	7 883	14 446	22 329	52 472	9 293	61 765	291 079	12 272	74 141	377 491
1997*														
Jun	134 432	52 104	15 364	201 900	8 548	15 788	24 336	52 499	9 558	62 057	288 293	11 743	63 175	363 210
Jul	135 230	52 563	15 484	203 277	8 252	15 059	23 311	49 515	9 541	59 056	285 645	11 480	74 487	371 612
Aug	136 678	52 854	15 575	205 107	8 207	14 379	22 586	48 581	9 569	58 150	285 843	11 434	73 195	370 472
Sep	135 206	53 811	14 845	203 862	8 277	14 167	22 443	49 347	9 239	58 587	284 892	12 468	77 982	375 342
Oct	136 104	51 855	16 358	204 316	8 482	14 108	22 590	51 018	9 275	60 293	287 199	12 278	82 490	381 967
Nov	138 140	50 930	16 516	205 586	7 798	14 083	21 881	51 174	9 123	60 297	287 765	12 101	66 002	365 868
Dec	141 197	46 998	19 119	207 313	7 883	14 452	22 335	52 478	9 293	61 771	291 418	12 293	74 140	377 852
1998*														
Jan	142 456	48 794	18 294	209 544	7 817	14 155	21 972	51 564	9 591	61 155	292 671	11 571	74 295	378 537
Feb	141 697	48 569	18 784	209 049	6 456	13 734	20 190	49 261	9 480	58 741	287 981	10 982	74 473	373 436
Mar	140 679	48 734	19 424	208 837	6 422	13 491	19 913	54 335	9 497	63 832	292 582	10 297	76 224	379 102
Apr	142 089	48 617	20 140	210 846	6 424	13 509	19 934	51 679	9 544	61 223	292 003	10 579	70 349	372 931
May	143 063	48 457	20 840	212 360	6 498	13 208	19 706	52 620	9 694	62 315	294 381	11 421	80 936	386 738
Jun	142 588	48 267	21 236	212 091	6 214	13 250	19 464	55 707	9 627	65 334	296 889	10 320	68 852	376 061

### 5.2 Bank lending to the public, mill. FIM

End of period	Non-financial corporations (1)	Financial and insurance institutions (excl. banks) (2)	General government (excl. central government) (3)	Non-profit institutions (4)	Households (5)	Foreign sector (6)	Markka-lending, total (1+2+3+4+5+6) (7)	Foreign currency lending (8)	Total lending (7+8) (9)
1993	83 285	9 304	4 036	12 802	171 540	103	281 070	69 819	350 889
1994	81 130	11 121	3 367	13 016	162 913	124	271 670	47 078	318 748
1995	78 601	13 045	2 918	12 645	155 990	253	263 452	33 124	296 575
1996	82 894	18 554	3 052	13 088	152 594	119	270 301	24 130	294 430
1997*	77 351	21 257	3 241	13 453	155 388	.	270 691	16 252	286 943
1997*									
Jun	79 240	17 409	2 973	13 214	152 671	.	265 507	17 709	283 215
Jul	78 977	17 866	2 964	13 294	153 460	.	266 562	17 318	283 879
Aug	78 637	19 006	2 976	13 467	154 484	.	268 570	16 802	285 371
Sep	78 597	19 613	3 071	13 617	155 003	.	269 900	16 378	286 278
Oct	78 392	20 566	3 055	13 573	155 567	.	271 151	18 314	289 465
Nov	76 557	21 218	3 215	13 709	156 005	.	270 703	16 928	287 630
Dec	77 351	21 257	3 241	13 453	155 391	.	270 693	16 246	286 939
1998*									
Jan	77 916	21 485	3 240	13 152	155 347	.	271 140	16 352	287 492
Feb	78 339	22 196	3 450	13 166	155 873	.	273 024	17 431	290 455
Mar	77 948	22 033	3 422	13 278	156 561	.	273 242	17 569	290 812
Apr	78 706	22 529	3 533	13 327	157 416	.	275 511	20 317	295 828
May	79 401	23 107	3 678	13 533	159 049	.	278 768	19 879	298 647
Jun	81 658	23 258	3 462	13 603	160 359	.	282 340	19 291	301 631

### 5.3 Money supply, mill. FIM

End of period	Foreign assets, net	Domestic credit			Other items, net	Monetary aggregates		
		Net claims on the central government	Claims on the public	Total (2+3)		M <sub>1</sub>	M <sub>2</sub> (1+4+5)	M <sub>3</sub>
	1	2	3	4	5	6	7	8
1993	-25 989	1 848	403 742	405 589	-100 006	141 759	279 595	322 408
1994	12 844	6 092	365 712	371 804	-97 953	154 357	286 696	328 509
1995	25 481	19 837	353 340	373 177	-94 870	175 921	303 788	329 820
1996	40 638	12 821	350 230	363 052	-106 399	204 834	297 291	325 473
1997*	69 620	12 184	339 143	351 327	-115 351	215 763	305 596	353 735
1997*								
Jun	73 732	3 256	337 432	340 689	-112 526	209 080	301 894	350 332
Jul	73 618	6 226	337 876	344 102	-118 445	206 628	299 276	353 820
Aug	72 388	5 162	339 432	344 594	-117 141	207 465	299 841	348 202
Sep	87 246	3 686	340 221	343 906	-132 758	206 332	298 394	350 813
Oct	83 239	5 621	342 934	348 555	-130 718	209 482	301 077	353 981
Nov	71 173	9 482	340 584	350 067	-119 399	211 188	301 841	345 743
Dec	69 620	12 184	339 143	351 327	-115 011	216 074	305 936	354 075
1998*								
Jan	66 191	11 714	339 957	351 671	-111 144	215 883	306 718	363 671
Feb	62 245	8 967	342 763	351 729	-111 978	211 429	301 996	356 204
Mar	56 528	15 201	342 135	357 337	-107 688	215 030	306 176	365 046
Apr	54 385	16 845	346 736	363 581	-111 624	214 532	306 343	361 023
May	66 852	8 797	349 354	358 151	-116 210	216 593	308 793	367 202
Jun	..	..	..	..	..	218 667	311 046	356 416

### 5.4 Liabilities and assets of the central government, mill. FIM

End of period	Foreign currency-denominated debt			Markka-denominated debt				Total (4+5+6+7)	Central government debt (3+8)	Out-standing lending	Cash funds
	Bonds	Other debt	Total (1+2)	Public bonds	Other long-term liabilities	Treasury notes and bills	Miscellaneous items				
	1	2	3	4	5	6	7	8	9	10	11
1993	142 824	12 753	155 577	71 082	16 060	22 824	-9 700	100 266	255 843	66 439	36 487
1994	160 587	15 975	176 562	93 008	17 100	33 153	-12 300	130 961	307 523	67 658	43 012
1995	158 545	13 756	172 301	143 948	17 492	37 864	-12 300	187 004	359 305	66 855	41 878
1996	158 847	16 161	175 008	177 700	17 187	37 620	-12 300	220 479	395 487	64 316	38 369
1997	142 717	25 839	168 556	214 876	16 545	30 388	-12 300	249 745	418 301	65 305	33 868
1997											
Jun	159 454	24 635	184 089	186 952	16 581	42 797	-12 300	234 248	418 337	65 979	37 376
Jul	156 183	25 261	181 444	190 450	16 574	44 522	-12 300	239 533	420 977	65 569	37 195
Aug	155 814	24 994	180 808	192 441	16 574	41 545	-12 300	238 547	419 355	65 716	37 233
Sep	154 425	25 586	180 011	202 789	16 573	39 063	-12 300	246 332	426 343	66 004	48 389
Oct	154 826	25 462	180 288	204 172	16 573	34 599	-12 300	243 310	423 598	66 151	48 685
Nov	141 898	25 597	167 495	216 455	16 557	34 458	-12 300	255 396	422 891	65 837	42 539
Dec	142 717	25 839	168 556	214 876	16 545	30 388	-12 300	249 745	418 301	65 305	33 868
1998											
Jan	143 626	26 312	169 938	214 642	16 545	31 081	-12 300	250 164	420 102	65 730	..
Feb	143 776	26 265	170 041	217 195	16 545	25 712	-12 417	247 232	417 273	66 036	..
Mar	137 141	26 233	163 374	218 647	16 494	27 949	-12 417	250 870	414 244	66 665	..
Apr	132 022	25 735	157 757	220 246	16 310	24 755	-12 417	249 051	406 808	66 838	..
May	140 798	24 581	165 379	221 126	16 239	20 142	-12 417	245 318	410 697	..	..
Jun	141 919	24 942	166 861	231 777	15 651	20 489	-12 417	255 787	422 648	..	..

## 5.5 Markka bond market

### A) Issues, mill. FIM

During period	Corporations	Financial institutions	Central government	Local government	Others	Total (1+2+3+4+5)
	1	2	3	4	5	6
1993	11 691	10 481	36 512	2 235	63	60 981
1994	4 053	9 899	31 553	593	–	46 099
1995	643	4 487	66 557	26	–	71 713
1996	3 213	9 074	62 139	20	–	74 447
1997*	2 383	7 041	57 165	–	–	66 589
1997*						
Jun	451	289	5 472	–	–	6 212
Jul	–	–	3 508	–	–	3 508
Aug	–	218	3 375	–	–	3 593
Sep	820	783	10 431	–	–	12 034
Oct	1	387	7 424	–	–	7 812
Nov	553	1 210	6 393	–	–	8 156
Dec	60	1 112	–	–	–	1 172
1998*						
Jan	–	714	14 651	–	–	15 365
Feb	401	1 763	4 032	–	–	6 196
Mar	491	825	6 505	–	–	7 821
Apr	1 001	875	3 392	–	–	5 268
May	220	877	2 430	–	–	3 528
Jun	422	1 376	10 842	–	–	12 640

### B) Stock, mill. FIM

End of period	By sector					By type of loan			Total (1+2+3+4+5) = (6+7+8)
	Corporations	Financial institutions	Central government	Local government	Others	Public issues		Private placings	
						Taxable	Taxfree		
	1	2	3	4	5	6	7	8	9
1993	32 459	73 893	73 682	6 884	2 009	119 552	10 391	58 984	188 927
1994	30 179	66 467	94 865	6 981	953	141 935	7 581	49 929	199 445
1995	26 480	55 223	145 177	5 814	357	186 799	5 034	41 218	233 051
1996	25 266	44 849	179 419	4 362	100	220 037	2 956	31 003	253 996
1997*	23 327	41 046	216 215	3 648	84	258 481	1 345	24 494	284 320
1997*									
Jun	23 872	41 428	188 292	3 943	91	229 039	1 833	26 754	257 626
Jul	23 402	40 516	191 789	3 932	91	231 770	1 829	26 131	259 730
Aug	23 103	40 512	193 780	3 924	91	233 700	1 663	26 047	261 410
Sep	23 844	40 656	204 128	3 918	90	245 241	1 477	25 918	272 636
Oct	23 433	40 545	211 426	3 910	88	252 212	1 366	25 824	279 402
Nov	23 709	41 138	217 794	3 860	86	259 724	1 349	25 514	286 587
Dec	23 327	41 046	216 215	3 648	84	258 481	1 345	24 494	284 320
1998*									
Jan	22 774	43 700	215 980	3 632	84	261 271	1 131	23 768	286 170
Feb	23 012	44 944	218 534	3 489	84	265 528	1 003	23 532	290 063
Mar	23 341	42 322	219 982	3 483	82	265 134	845	23 231	289 210
Apr	24 228	42 654	221 344	3 470	82	268 427	837	22 514	291 778
May	23 838	43 282	222 225	3 470	81	270 136	743	22 017	292 896
Jun	21 591	42 002	232 875	3 464	80	279 616	736	19 660	300 012



### C) Turnover, mill. FIM

During period	Primary dealers' transactions in benchmark government bonds		
	Purchases from other primary dealers	Purchases from customers	Sales to customers
	1	2	3
1993	42 945	95 647	117 489
1994	173 096	150 908	176 647
1995	133 357	190 069	215 879
1996	201 528	222 584	242 310
1997	258 634	264 994	291 056
1997			
Jul	17 873	23 428	27 905
Aug	21 752	25 146	25 637
Sep	28 032	34 507	37 825
Oct	40 705	33 503	31 670
Nov	17 106	19 655	19 411
Dec	21 198	16 515	16 656
1998			
Jan	22 397	23 508	25 746
Feb	12 826	15 971	16 099
Mar	17 211	22 000	23 870
Apr	14 448	15 315	18 415
May	12 010	14 332	14 337
Jun	11 048	10 520	12 932
Jul	14 767	16 204	16 980

### 5.6 Helsinki Stock Exchange

Average of daily observations	Share prices										Turnover <sup>1</sup> , mill. FIM		
	HEX index (28 Dec 1990=1000)										Shares and subscriptions rights	Bonds and debentures	Total
	All-share index	Banks and finance	Insurance	Trade	Construction	Forest industries	Metal and engineering	Telecommunications and electronics	Chemicals	Conglomerates			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1993	1 240	608	644	-	-	1 695	1 749	-	-	1 751	46 337	59 977	106 314
1994	1 847	719	802	-	-	2 284	2 675	-	-	3 068	68 671	2 147	70 818
1995	1 918	500	638	-	-	2 062	2 255	-	-	4 251	83 019	1 075	84 094
1996	2 032	460	820	-	-	2 040	2 564	-	-	5 681	101 265	541	101 806
1997	3 207	822	1 576	2 255	1 006	2 712	3 408	1 416	900	7 477	186 088	488	186 576
1997													
Jul	3 432	839	1 590	2 361	1 064	2 919	3 768	1 565	929	7 849	15 708	28	15 736
Aug	3 530	898	1 581	2 301	1 022	3 001	3 692	1 672	913	7 705	15 325	46	15 371
Sep	3 480	883	1 627	2 209	989	3 001	3 543	1 662	885	7 445	15 719	43	15 762
Oct	3 733	1 016	1 921	2 268	994	3 204	3 607	1 833	926	7 689	24 739	33	24 772
Nov	3 448	1 022	1 925	2 279	946	2 737	3 231	1 631	901	7 593	15 163	27	15 190
Dec	3 303	1 080	2 105	2 370	926	2 508	3 065	1 449	900	7 757	17 764	53	17 817
1998													
Jan	3 430	1 136	2 128	2 526	956	2 589	3 045	1 499	933	8 324	15 485	53	15 538
Feb	3 851	1 190	2 418	2 639	1 005	2 886	3 167	1 804	988	9 848	20 050	43	20 093
Mar	4 249	1 270	2 570	2 759	1 009	3 278	3 393	2 085	1 054	10 813	24 260	173	24 433
Apr	4 705	1 393	2 957	2 876	1 073	3 460	3 506	2 450	1 135	11 614	25 985	38	26 023
May	4 925	1 344	3 024	2 832	1 145	3 673	3 748	2 632	1 121	11 547	18 303	21	18 324
Jun	4 823	1 335	2 838	2 825	1 208	3 427	3 642	2 624	1 113	10 804	27 508	10	27 518
Jul	5 317	1 430	3 263	2 741	1 145	3 293	3 662	3 272	1 112	10 979	27 302	11	27 313

<sup>1</sup> During period.

## 6. Balance of payments, foreign assets and liabilities

### 6.1 Current account, mill. FIM

During period	Exports of goods, fob	Transport receipts	Travel receipts	Other services receipts	Services receipts, total (2+3+4)	Exports of goods and services (1+5)	Investment income	Transfers and other income	Current account receipts (6+7+8)	Imports of goods, cif	Transport expenditure	Travel expenditure	Other services expenditure
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	132 550	10 430	7 079	9 379	26 888	159 438	6 137	6 506	172 080	101 559	5 646	9 237	17 008
1994	152 022	11 385	7 314	11 808	30 508	182 530	9 617	4 919	197 067	118 684	5 862	8 697	16 800
1995	172 820	11 900	7 536	14 986	34 422	207 242	12 929	8 596	228 767	125 450	6 029	10 450	19 150
1996*	182 436	12 400	8 778	15 315	36 492	218 928	15 375	7 698	242 002	138 110	5 545	10 979	16 921
1997*	208 765	13 145	10 172	15 597	38 913	247 678	20 251	8 707	276 636	157 170	6 423	11 762	17 277
1995													
IV	46 154	2 976	1 903	3 870	8 749	54 903	3 892	3 360	62 155	33 926	1 481	2 779	4 937
1996*													
I	42 631	2 995	2 037	3 473	8 505	51 136	4 242	1 446	56 824	33 496	1 386	2 720	4 299
II	48 126	3 127	2 233	3 729	9 089	57 215	4 511	2 076	63 802	34 520	1 371	2 783	4 088
III	41 925	3 251	2 425	4 158	9 833	51 758	3 110	1 339	56 206	31 990	1 406	2 676	3 994
IV	49 754	3 026	2 084	3 955	9 066	58 820	3 512	2 837	65 169	38 102	1 382	2 801	4 540
1997*													
I	46 239	3 216	2 000	3 274	8 490	54 728	4 311	1 913	60 953	35 832	1 548	2 536	4 282
II	52 517	3 296	2 570	4 040	9 905	62 422	5 842	2 087	70 352	39 597	1 655	3 025	4 348
III	52 522	3 297	3 021	4 052	10 370	62 892	4 756	1 652	69 301	38 483	1 627	3 015	3 997
IV	57 487	3 336	2 581	4 231	10 148	67 635	5 341	3 055	76 031	43 258	1 593	3 186	4 650
1998*													
I	57 072	3 576	2 853	3 967	10 395	67 468	4 843	2 035	74 345	42 137	1 689	2 927	4 653

During period	Services expenditure, total (11+12 +13)	Imports of goods and services (10+14)	Investment expenditure	Transfers and other expenditure	Current account expenditure (15+16 +17)	Trade account (1-10)	Transport (2-11)	Travel (3-12)	Other services (4-13)	Services account (20+21 +22)	Goods and services account (19+23)	Investment income, net (7-16)	Transfers and others, net (8-17)	Current account (24+25 +26)= (9-18)
	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1993	31 891	133 450	34 580	10 390	178 421	30 991	4 784	-2 159	-7 629	-5 004	25 988	-28 443	-3 885	-6 340
1994	31 359	150 043	31 801	8 596	190 440	33 339	5 523	-1 382	-4 992	-851	32 487	-22 184	-3 676	6 627
1995	35 629	161 080	32 529	12 627	206 237	47 370	5 870	-2 914	-4 164	-1 207	46 162	-19 600	-4 032	22 531
1996*	33 444	171 554	32 900	14 520	218 974	44 326	6 855	-2 201	-1 606	3 048	47 374	-17 525	-6 821	23 027
1997*	35 462	192 632	34 767	15 154	242 553	51 595	6 722	-1 591	-1 680	3 451	55 046	-14 516	-6 447	34 083
1995														
IV	9 196	43 122	6 538	3 407	53 067	12 228	1 494	-875	-1 066	-447	11 781	-2 646	-47	9 087
1996*														
I	8 405	41 902	8 529	4 010	54 441	9 135	1 609	-683	-827	99	9 234	-4 287	-2 563	2 384
II	8 241	42 762	10 773	3 862	57 396	13 606	1 756	-550	-358	848	14 453	-6 262	-1 786	6 406
III	8 075	40 066	6 556	3 055	49 677	9 935	1 845	-251	164	1 758	11 692	-3 447	-1 716	6 529
IV	8 723	46 825	7 042	3 593	57 460	11 652	1 645	-717	-585	343	11 994	-3 530	-756	7 709
1997*														
I	8 366	44 198	8 627	4 497	57 323	10 407	1 667	-536	-1 008	123	10 530	-4 316	-2 584	3 630
II	9 028	48 625	11 105	3 283	63 012	12 920	1 640	-455	-308	877	13 798	-5 262	-1 195	7 340
III	8 639	47 122	7 389	3 788	58 299	14 039	1 670	5	55	1 730	15 770	-2 633	-2 135	11 002
IV	9 429	52 687	7 645	3 587	63 919	14 229	1 744	-605	-419	720	14 949	-2 304	-532	12 112
1998*														
I	9 269	51 406	9 986	4 745	66 137	14 935	1 887	-74	-687	1 126	16 062	-5 143	-2 710	8 208

## 6.2 Capital and financial account, mill. FIM

During period	Capital account, imports of capital	Financial account											Total (2+8+12)
		Direct investment in Finland	Portfolio investment in Finland					Other investment in Finland					
			Shares	Bonds	Of which: markka-denominated bonds	Money market instruments	Financial derivatives	Total (3+4+6+7)	Trade credits	Loans	Other capital	Total (9+10+11)	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1993	0	4 945	12 748	30 353	3 616	-4 382	..	38 719	4 467	5 457	-29 801	-19 877	23 787
1994	0	8 240	13 400	21 977	-5 783	-2 134	59	33 302	3 107	647	-1 392	2 361	43 903
1995	487	4 642	8 734	-17 868	-3 634	1 421	2 588	-5 125	-1 216	-6 985	8 376	176	-307
1996*	596	5 093	8 937	-4 624	6 250	1 016	1 501	6 830	-3 383	12 737	-1 347	8 006	19 929
1997*	1 296	8 009	20 774	-4 353	17 191	2 776	616	19 813	-662	10 681	6 320	16 340	44 161
1995 IV	487	3 109	1 920	-6 181	358	2 666	839	-756	1 609	-254	2 707	4 063	6 416
1996* I	0	1 759	1 216	2 635	1 155	502	1 119	5 472	-3 416	4 632	-552	665	7 895
II	0	486	6 143	-5 184	2 516	363	754	2 076	-735	4 717	-3 119	863	3 425
III	0	2 522	374	-4 841	277	-254	-180	-4 902	-42	2 516	4 371	6 844	4 463
IV	596	326	1 204	2 766	2 303	406	-192	4 185	809	872	-2 048	-366	4 145
1997* I	0	2 342	5 121	4 126	952	2 197	-94	11 349	-822	6 608	16 464	22 250	35 941
II	450	2 574	7 579	5 234	9 562	-1 751	28	11 091	-1 731	3 193	-7 150	-5 688	7 977
III	0	552	3 460	2 844	10 013	-2 252	438	4 489	867	5 016	3 438	9 322	14 363
IV	846	2 541	4 614	-16 558	-3 336	4 582	245	-7 117	1 023	-4 135	-6 432	-9 544	-14 120
1998* I	66	1 638	5 064	-8 937	1 101	-2 277	-226	-6 376	148	438	4 927	5 514	776

During period	Capital account, exports of capital	Financial account											Errors and omissions	
		Direct investment abroad	Portfolio investment abroad					Other investment abroad				Total (15+20+24)		Change in central bank's reserve assets (increase -)
			Shares	Bonds	Money market instruments	Financial derivatives	Total (16+17+18+19)	Trade credits	Loans	Other capital	Total (21+22+23)			
14	15	16	17	18	19	20	21	22	23	24	25	26	27	
1993	0	8 050	873	767	1 932	..	3 571	1 923	-839	9 576	10 660	22 282	-1 219	6 055
1994	0	22 447	434	-4 294	-855	-279	-4 994	1 213	-7 460	9 762	3 516	20 968	-25 504	-4 058
1995	206	6 539	892	3 685	-5 492	-168	-1 084	3 839	-2 712	11 750	12 877	18 332	1 480	-5 652
1996*	340	16 516	3 250	15 455	364	-172	18 897	982	4 523	15 927	21 431	56 845	14 075	-442
1997*	0	22 879	9 493	15 215	-617	371	24 463	3 789	6 761	3 107	13 657	60 998	-10 788	-7 754
1995 IV	102	2 410	184	1 797	-967	-115	899	933	-2 373	6 433	4 993	8 302	291	-7 878
1996* I	61	5 508	567	4 019	2 424	-26	6 983	-670	2 416	6 458	8 205	20 696	7 254	3 224
II	0	6 798	1 041	3 041	162	71	4 315	779	-2 064	4 834	3 549	14 662	8 457	-3 626
III	0	3 793	728	4 179	-2 457	-51	2 399	-792	1 565	1 927	2 700	8 892	-1 132	-970
IV	279	417	914	4 216	235	-166	5 200	1 665	2 606	2 708	6 979	12 595	-505	930
1997* I	0	2 347	1 866	6 620	4 286	13	12 786	918	3 245	-3 185	978	16 110	-22 134	-1 327
II	0	6 338	2 475	5 313	-2 783	275	5 280	189	1 127	7 390	8 706	20 324	3 031	1 527
III	0	3 551	2 165	595	-2 975	52	-162	966	14 561	4 868	20 395	23 784	-2 968	1 387
IV	0	10 643	2 987	2 687	855	31	6 559	1 716	-12 172	-5 966	-16 422	780	11 283	-9 342
1998* I	0	11 165	2 414	1 433	-1 090	-199	2 558	1 274	5 903	-8 595	-1 417	12 306	7 878	-4 623

### 6.3 Finland's international investment position, mill. FIM

Position at end of period	Assets											Total assets (1+6+11)
	Direct investment abroad	Portfolio investment					Other investment					
		Shares	Bonds	Money market instruments	Financial derivatives	Total (2+3+4+5)	Trade credits	Loans	Currency and deposits	Other	Total (7+8+9+10)	
1	2	3	4	5	6	7	8	9	10	11	12	
1993	53 090	1 783	10 709	11 030	447	23 968	26 256	35 981	5 799	91 127	159 162	236 221
1994	59 451	1 984	5 109	9 115	488	16 696	25 500	24 847	8 257	109 847	168 451	244 598
1995	65 350	3 216	9 619	2 736	177	15 748	28 358	20 381	7 290	115 543	171 571	252 669
1996*	82 038	7 460	25 077	3 478	-21	35 993	29 929	25 438	5 895	124 541	185 803	303 834
1997*	110 216	18 373	42 384	3 155	1 404	65 316	30 027	34 236	7 249	148 954	220 466	395 998
1995 IV	65 350	3 216	9 619	2 736	177	15 748	28 358	20 381	7 290	115 543	171 571	252 669
1996*												
I	73 551	3 984	14 063	5 670	169	23 886	27 980	23 594	5 435	121 308	178 317	275 754
II	79 164	4 999	16 834	5 842	93	27 768	28 892	21 499	5 523	118 075	173 989	280 922
III	81 377	5 835	20 620	3 176	48	29 679	27 902	22 873	6 488	119 331	176 594	287 650
IV	82 038	7 460	25 077	3 478	-21	35 993	29 929	25 438	5 895	124 541	185 803	303 834
1997*												
I	85 318	9 898	32 534	7 598	171	50 201	26 391	29 411	6 065	147 489	209 355	344 875
II	93 589	13 400	38 994	5 080	610	58 083	26 976	31 180	7 027	155 578	220 760	372 433
III	98 456	16 001	39 793	2 239	813	58 845	28 097	45 991	5 490	165 857	245 435	402 736
IV	110 216	18 373	42 384	3 155	1 404	65 316	30 027	34 236	7 249	148 954	220 466	395 998
1998*												
I	123 073	23 391	45 127	2 114	1 381	72 013	32 017	40 318	7 503	134 673	214 512	409 598

Position at end of period	Liabilities												Total liabilities (13+19+24)
	Direct investment in Finland	Portfolio investment					Other investment						
		Shares	Bonds	Of which: markka denominated bonds	Money market instruments	Financial derivatives	Total (14+15+17+18)	Trade credits	Loans	Currency and deposits	Other	Total (20+21+22+23)	
13	14	15	16	17	18	19	20	21	22	23	24	25	
1993	24 391	30 375	266 269	27 402	14 995	-6 103	305 536	18 206	90 825	4 025	54 188	167 243	497 170
1994	31 846	60 558	258 823	22 285	10 309	-5 179	324 511	19 852	82 649	3 430	46 566	152 498	508 855
1995	36 894	63 746	228 676	19 638	10 099	1 545	304 066	18 540	69 249	2 568	53 557	143 914	484 874
1996*	40 854	108 932	229 919	26 284	10 888	3 634	353 373	14 863	83 295	1 733	55 279	155 170	549 397
1997*	49 005	172 393	243 679	45 180	14 110	5 567	435 749	13 997	98 221	2 760	64 262	179 241	663 996
1995 IV	36 894	63 746	228 676	19 638	10 099	1 545	304 066	18 540	69 249	2 568	53 557	143 914	484 874
1996*													
I	38 422	68 674	241 085	20 699	11 192	2 424	323 375	14 873	77 934	1 518	55 412	149 737	511 533
II	38 616	80 962	234 317	23 855	11 126	3 099	329 504	14 214	81 836	1 939	51 588	149 577	517 697
III	40 808	91 198	225 308	23 656	11 286	2 948	330 740	13 940	82 365	1 742	55 621	153 668	525 216
IV	40 854	108 932	229 919	26 284	10 888	3 634	353 373	14 863	83 295	1 733	55 279	155 170	549 397
1997*													
I	43 191	129 824	240 656	27 577	13 258	2 789	386 527	13 794	90 724	2 624	72 506	179 648	609 366
II	45 801	162 713	254 080	37 534	11 813	1 003	429 609	12 092	97 074	2 870	66 344	178 380	653 791
III	46 350	201 959	258 062	47 920	9 267	2 642	471 930	12 978	102 147	2 737	69 899	187 762	706 042
IV	49 005	172 393	243 679	45 180	14 110	5 567	435 749	13 997	98 221	2 760	64 262	179 241	663 996
1998*													
I	50 648	246 199	239 126	46 413	11 727	4 689	501 741	14 123	100 037	3 097	69 816	187 073	739 462

#### 6.4 Finland's net international investment position (assets less liabilities)<sup>1</sup>, by sector, mill. FIM

Position at end of period	Corporate sector	Households and nonprofit institutions	Banks	Bank of Finland	Other financial institutions	Central government	Local government	Net (1+2+3+4+5+6+7)	Net interest and dividend expenditure	Net interest and dividend expenditure in relation to current account receipts, %
	1	2	3	4	5	6	7	8	9	10
1993	-54 315	3 436	-45 658	33 279	-29 737	-164 892	-3 062	-260 949	21 897	12.7
1994	-82 428	3 503	-33 800	52 606	-21 931	-179 113	-3 093	-264 257	20 296	10.3
1995	-72 374	2 293	-18 970	47 708	-13 297	-174 481	-3 085	-232 205	17 490	7.6
1996*	-107 522	1 468	12 904	35 522	-1 785	-183 703	-2 448	-245 563	16 477	6.8
1997*	-153 965	3 218	11 076	50 931	11 561	-188 315	-2 503	-267 998	14 116	5.1
1995 IV	-72 374	2 293	-18 970	47 708	-13 297	-174 481	-3 085	-232 205	2 118	3.4
1996* I	-75 429	2 502	-4 613	42 679	-9 630	-188 118	-3 169	-235 779	4 025	7.1
II	-83 595	2 595	4 569	33 647	-5 689	-185 184	-3 118	-236 776	6 000	9.4
III	-92 415	1 104	6 027	34 482	-1 893	-182 336	-2 535	-237 566	3 185	5.7
IV	-107 522	1 468	12 904	35 522	-1 785	-183 703	-2 448	-245 563	3 268	5.0
1997* I	-130 938	1 715	-6 325	59 120	3 336	-189 002	-2 396	-264 491	4 211	6.9
II	-159 963	1 854	11 131	58 737	8 240	-198 960	-2 396	-281 358	5 157	7.3
III	-192 639	2 930	20 426	61 333	9 756	-202 657	-2 456	-303 306	2 528	3.6
IV	-153 965	3 218	11 076	50 931	11 561	-188 315	-2 503	-267 998	2 219	2.9
1998* I	-210 962	3 959	1 000	44 268	14 272	-180 103	-2 297	-329 864	5 038	6.8

<sup>1</sup> Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

## 7. Foreign trade

### 7.1 Exports, imports and the trade balance, mill. FIM

During period	Exports, fob	Imports, cif	Balance (1-2)
	1	2	3
1993	134 114	103 165	30 949
1994	154 164	120 612	33 552
1995	176 021	128 556	47 465
1996	186 336	141 720	44 616
1997*	211 696	159 190	52 506
1997*			
May	17 380	12 830	4 550
Jun	17 283	13 357	3 926
Jul	18 121	12 324	5 797
Aug	16 455	12 254	4 201
Sep	18 964	14 857	4 107
Oct	20 811	15 272	5 539
Nov	19 630	14 142	5 488
Dec	18 055	14 795	3 260
1998*			
Jan	18 115	13 334	4 781
Feb	20 447	14 001	6 446
Mar	19 639	15 866	3 773
Apr	20 500	14 800	5 700
May	18 200	14 700	3 500

### 7.2 Foreign trade: indices of volume, prices and terms of trade, 1990=100

Period	Volume (seasonally adjusted)		Prices		Terms of trade
	Exports	Imports	Exports	Imports	
	1	2	3	4	
1993	120.6	83.6	109.7	119.6	91.7
1994	136.5	98.0	111.4	119.3	93.3
1995	145.7	104.6	119.2	119.2	100.0
1996	153.1	113.5	120.2	121.1	99.3
1997*	177.4	126.1	117.7	122.4	96.2
1997*					
May	176.0	120.4	116.2	122.3	95.0
Jun	173.9	129.4	116.3	121.9	95.4
Jul	192.4	126.5	117.2	123.6	94.8
Aug	176.8	122.8	118.5	123.5	96.0
Sep	188.5	139.2	118.7	123.3	96.3
Oct	192.9	135.9	120.7	123.8	97.5
Nov	182.9	129.8	120.1	123.2	97.5
Dec	179.7	136.1	120.7	122.5	98.5
1998*					
Jan	186.2	136.0	120.2	121.4	99.0
Feb	204.3	138.8	120.4	120.7	99.8
Mar	191.4	146.1	120.1	120.2	99.9
Apr	197.0	137.3	118.9	120.7	98.5
May	180.6	140.4	119.0	120.3	98.9

### 7.3 Foreign trade by main groups, mill. FIM

During period	Exports by industries, fob					Imports by use of goods, cif				
	Wood industry products	Paper industry products	Chemical industry products	Metal and engineering industry products	Other goods	Raw materials (excl. crude oil)	Crude oil, fuels and lubricants	Finished goods		Other goods
								Investment goods	Consumer goods	
	1	2	3	4	5	6	7	8	9	10
1993	10 910	37 430	14 205	48 158	23 411	54 792	10 904	15 396	21 066	1 007
1994	14 198	41 249	15 725	55 895	27 097	66 156	11 687	17 227	24 684	858
1995	13 451	48 754	15 877	69 336	28 603	71 397	9 685	19 660	25 514	2 300
1996	12 688	44 602	18 482	78 969	31 595	72 970	12 944	22 004	30 897	2 905
1997*	15 423	49 674	20 743	91 757	34 099	84 129	12 886	23 904	34 899	3 372
1997*										
Apr	1 355	4 258	1 936	8 275	3 048	7 664	941	2 095	3 132	534
May	1 443	4 194	1 807	6 970	2 966	6 999	1 067	1 842	2 703	219
Jun	1 301	3 726	1 709	7 672	2 875	7 394	1 065	1 965	2 650	283
Jul	1 063	4 303	1 672	8 606	2 477	6 416	1 151	1 750	2 817	190
Aug	934	4 333	1 741	6 752	2 695	6 896	767	1 732	2 662	197
Sep	1 456	4 437	1 700	8 197	3 174	7 696	1 061	2 326	3 192	582
Oct	1 673	4 846	2 024	8 980	3 288	7 865	1 350	2 486	3 394	177
Nov	1 398	4 285	1 907	9 029	3 011	7 530	1 140	2 321	2 921	230
Dec	1 268	4 299	1 695	8 087	2 706	7 167	1 540	2 613	3 087	388
1998*										
Jan	1 152	4 564	1 751	7 414	3 234	6 779	1 269	2 067	2 858	361
Feb	1 273	4 477	1 563	9 947	3 187	7 597	801	2 000	3 283	320
Mar	1 412	4 903	1 935	8 734	2 655	8 957	839	2 736	3 593	-259
Apr	1 383	4 917	2 017	9 214	2 969	7 725	865	2 187	3 275	748

## 7.4 Foreign trade by regions and countries

Region and country	Exports, fob				Imports, cif			
	1997*		May 1997 – Apr 1998		1997*		May 1997 – Apr 1998	
	Mill. FIM	Percentage share	Mill. FIM	12-month change calculated from 12-month moving total	Mill. FIM	Percentage share	Mill. FIM	12-month change calculated from 12-month moving total
	1	2	3	4	5	6	7	8
<b>European Union<sup>1)</sup></b>	113 179	53.2	120 126	13.8	94 644	58.8	98 634	13.2
Austria	2 006	0.9	2 262	27.9	1 695	1.1	1 796	19.4
Belgium and Luxembourg	4 920	2.3	5 247	9.3	4 056	2.5	4 237	2.8
Denmark	6 544	3.1	6 722	16.5	5 469	3.4	5 936	19.4
France	9 020	4.2	10 072	25.4	7 749	4.8	8 225	23.3
Germany	23 440	11.0	25 161	10.3	23 400	14.5	24 455	12.6
Greece	1 245	0.6	2 289	115.4	399	0.2	381	3.9
Ireland	1 745	0.8	1 823	44.5	1 455	0.9	1 554	30.0
Italy	6 334	3.0	7 052	31.4	6 471	4.0	6 963	18.9
Netherlands	8 769	4.1	9 147	16.3	6 478	4.0	6 903	27.4
Portugal	1 200	0.6	1 305	34.9	1 225	0.8	1 157	5.6
Spain	4 626	2.2	4 948	13.3	2 273	1.4	2 586	26.6
Sweden	20 926	9.8	21 314	4.1	19 470	12.1	20 061	15.5
United Kingdom	21 313	10.0	21 646	8.5	12 589	7.8	12 466	-1.1
<b>Rest of Europe</b>	42 868	20.1	46 060	31.8	28 452	17.7	28 845	17.4
Of which:								
Estonia	6 759	3.2	7 208	30.9	2 189	1.4	2 290	28.0
Norway	6 230	2.9	6 709	23.7	5 905	3.7	6 147	2.0
Poland	3 774	1.8	3 931	21.6	1 797	1.1	1 752	18.3
Russia	15 529	7.3	16 819	38.5	12 532	7.8	12 455	8.1
Switzerland	2 086	1.0	2 232	10.5	2 673	1.7	2 719	10.3
<b>Non-European industrialized countries<sup>2)</sup></b>	23 933	11.2	26 242	17.5	22 559	14.0	24 463	23.6
Of which:								
Australia	2 677	1.3	2 621	21.1	1 020	0.6	1 113	-7.0
Japan	4 033	1.9	3 917	-14.7	8 596	5.3	9 267	24.3
U.S.A.	14 783	6.9	17 221	22.1	11 807	7.3	12 960	27.0
<b>Dynamic Asian economies<sup>3)</sup></b>	16 782	7.9	16 884	16.8	7 322	4.5	7 638	13.3
Of which:								
China	3 807	1.8	4 816	57.3	2 868	1.8	2 913	24.6
Hong Kong	3 957	1.9	4 258	39.4	635	0.4	736	3.6
South Korea	2 459	1.2	2 176	-17.2	706	0.4	770	0.5
<b>Other countries</b>	16 080	7.6	16 088	16.7	8 020	5.0	8 250	28.8
<b>Total</b>	212 841	100.0	225 399	16.7	160 996	100.0	167 831	14.6
Of which:								
Africa	3 339	1.6	3 605	34.4	1 379	0.9	1 473	56.4
Asia	29 947	14.1	28 642	0.7	18 899	11.7	19 583	15.4
Central and South America	3 569	1.7	4 235	75.3	3 517	2.2	3 608	44.2
North America	16 839	7.9	19 312	26.6	12 861	8.0	13 986	26.2
Europe	156 047	73.3	166 186	17.9	123 096	76.5	127 479	12.8
Oceania	3 100	1.5	3 047	15.9	1 242	0.8	1 336	-9.9

<sup>1)</sup> Including exports / imports to EU unspecified by country.

<sup>2)</sup> Australia, Canada, Japan, New Zealand, United States.

<sup>3)</sup> China, Hong Kong, Malaysia, Singapore, South Korea, Taiwan, Thailand.

## 8. Domestic economic developments

### 8.1 Supply and use of resources, mill. FIM, 1990 prices (seasonally adjusted figures)

Period	Consumption expenditure		Fixed investment		Change in stocks, incl. statistical discrepancy	Domestic demand (1+2+3+4+5)	Exports	Imports	GDP (6+7-8)
	Private	Public	Private	Public					
	1	2	3	4					
1993	240 177	103 028	60 638	13 890	10 221	427 954	142 459	113 842	456 571
1994	244 761	102 728	60 543	14 107	22 236	444 375	161 376	128 411	477 340
1995	255 968	104 645	69 718	13 338	20 568	464 237	174 580	137 327	501 490
1996*	264 872	108 197	74 721	14 827	14 956	477 573	185 360	143 611	519 322
1997*	273 700	108 995	84 629	15 822	16 903	500 049	209 172	158 689	550 532
1995 IV	64 551	26 514	16 891	3 363	5 417	116 736	43 733	34 934	125 535
1996* I	65 819	26 667	18 401	3 568	5 385	119 840	44 131	36 289	127 682
II	65 591	27 045	18 178	3 676	2 099	116 589	46 173	34 966	127 796
III	66 231	27 172	19 024	3 787	3 856	120 070	46 216	35 302	130 984
IV	67 231	27 313	19 118	3 796	3 616	121 074	48 840	37 054	132 860
1997* I	67 391	26 856	19 310	3 824	4 436	121 817	48 844	37 502	133 159
II	68 013	27 261	21 068	4 081	4 944	125 367	51 321	39 646	137 042
III	68 643	27 424	21 968	4 019	3 338	125 392	54 584	40 651	139 325
IV	69 653	27 454	22 283	3 898	4 185	127 473	54 423	40 890	141 006
1998* I	69 941	27 323	20 535	3 676	6 632	128 107	56 506	42 689	141 924

### 8.2 Volume of industrial production, 1995=100 (seasonally adjusted figures)

Period	Total industry	Mining and quarrying	Manu- facturing	Wood and paper industry (23.5)	Metal industry (36.2)	Other manu- facturing (30.3)	Energy (8.9)
	(100.0)	(1.1)	(90.0)	(23.5)	(36.2)	(30.3)	(8.9)
	1	2	3	4	5	6	7
1993	84.9	90.2	83.7	89.2	72.6	92.5	96.0
1994	94.2	102.0	93.4	99.5	85.1	98.4	101.6
1995	100.1	99.3	100.1	100.0	100.2	100.0	100.0
1996	103.8	100.4	103.2	97.4	106.9	103.5	109.6
1997*	113.0	123.4	113.2	111.0	119.6	107.2	109.5
1997* May	109.9	114.9	109.9	110.1	113.6	104.2	108.1
Jun	112.7	139.7	112.9	109.8	119.2	106.0	105.6
Jul	117.6	128.3	117.1	111.5	126.3	110.0	109.7
Aug	114.0	94.4	114.6	112.4	121.2	107.2	110.4
Sep	114.8	143.9	115.3	110.8	119.7	105.6	105.6
Oct	119.6	137.7	120.8	113.6	123.4	107.9	109.4
Nov	117.5	137.0	118.1	118.1	124.1	109.8	111.7
Dec	121.1	132.7	122.5	119.5	131.6	112.1	112.2
1998* Jan	118.1	123.9	119.0	115.4	128.0	110.1	107.1
Feb	118.7	126.1	119.1	117.1	127.8	109.4	111.3
Mar	120.6	127.3	121.1	117.0	132.9	109.2	114.4
Apr	122.7	130.3	123.8	119.6	135.3	111.7	112.5
May	123.3	115.3	124.5	122.2	135.5	111.8	109.7



### 8.3 Indicators of domestic supply and demand, 1990=100 (seasonally adjusted figures)

Period	Volume of wholesale trade	Volume of retail trade	Volume of construction of buildings	Of which:		Imports of investment goods	Monthly GDP indicator
				Residential buildings	Industrial buildings		
	1	2	3	4	5	6	7
1993	68.5	78.1	46.9	47.2	35.6	72.9	89.8
1994	73.0	79.7	42.2	45.1	35.2	84.4	93.7
1995	76.2	82.6	42.0	41.1	49.9	88.5	97.8
1996	77.8	86.0	43.5	38.8	52.0	106.2	100.7
1997*	82.7	89.2	53.4	53.4	63.0	118.8	106.6
1997*							
May	92.1	77.4	55.4	52.9	64.6	113.0	105.2
Jun	92.9	77.7	54.0	53.1	63.6	117.5	106.3
Jul	93.4	77.7	53.1	52.6	65.5	120.7	107.5
Aug	92.8	78.2	52.4	52.9	66.5	109.9	106.8
Sep	93.4	79.6	53.3	54.6	66.1	128.1	107.9
Oct	93.6	79.6	53.7	55.7	66.7	132.4	108.5
Nov	92.5	81.7	55.5	56.7	67.0	117.7	109.1
Dec	90.4	82.4	57.6	58.4	66.4	130.2	110.3
1998*							
Jan	93.7	82.0	57.0	57.8	64.9	119.9	108.9
Feb	94.5	83.1	58.9	57.0	63.2	131.5	110.1
Mar	94.1	85.7	60.2	56.2	62.5	135.1	112.3
Apr	96.0	84.1	57.1	55.4	61.1	125.4	112.1
May	..	..	51.5	51.3	57.7	..	113.3

## 8.4 Wages and prices, 1990=100

Period	Index of wage and salary earnings	By sectors			Consumer price index	Indicator of underlying inflation	Basic price index for domestic supply	By origin		Producer price index for manufacturing	By marketing area		Building cost index
		Private	Of which: Manufacturing (SIC3)	Public				Domestic goods	Imported goods		Exported goods	Home market goods	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1993	109.2	108.8	110.0	110.1	109.7	109.9	104.8	100.8	119.3	105.5	109.2	103.9	100.7
1994	111.4	111.6	115.0	111.1	110.9	111.4	106.2	102.8	118.7	107.1	110.2	105.8	102.2
1995	116.6	117.4	123.1	114.7	112.0	111.3	106.9	103.8	118.5	110.8	118.0	107.7	103.5
1996	121.2	122.0	127.8	119.3	112.6	111.4	105.9	102.0	120.1	110.9	118.5	107.6	102.7
1997 <sup>1</sup>	123.7	124.4	130.8	122.0	114.0	112.3	107.6	104.0	120.9	111.4	116.8	109.1	105.2
1997													
Jun	..	..	..	..	114.2	112.5	107.4	103.9	120.5	111.0	115.4	109.1	105.2
Jul	..	..	..	..	114.2	112.3	107.9	104.1	122.1	111.4	116.3	109.3	105.5
Aug	..	..	..	..	114.4	112.5	108.2	104.5	122.0	112.2	117.6	109.9	106.0
Sep	..	..	..	..	114.6	112.8	108.4	104.8	121.8	112.3	117.8	110.0	106.1
Oct	..	..	..	..	114.9	113.1	108.7	105.0	122.3	113.0	119.8	110.0	106.3
Nov	..	..	..	..	114.8	112.9	108.5	104.9	121.7	112.8	119.2	110.0	106.2
Dec	..	..	..	..	114.8	113.0	108.2	104.8	121.0	112.8	119.9	109.7	106.3
1997 <sup>1</sup>													
I	123.5	124.4	130.8	121.6	112.9	111.4	106.6	103.0	119.8	110.2	114.9	108.0	103.8
II	123.4	124.2	130.7	121.7	114.0	112.2	107.1	103.6	120.2	110.7	115.3	108.7	104.8
III	123.5	124.3	130.6	121.9	114.4	112.5	108.2	104.5	122.0	112.0	117.2	109.7	105.9
IV	123.9	124.8	131.2	121.9	114.9	113.0	108.5	104.9	121.7	112.9	119.6	109.9	106.3
1998													
Jan	..	..	..	..	115.0	112.7	107.5	104.2	119.9	112.0	119.4	108.9	106.6
Feb	..	..	..	..	114.9	112.7	107.1	103.9	119.3	112.0	119.5	108.5	106.6
Mar	..	..	..	..	115.2	112.9	107.0	103.9	118.8	111.9	119.4	108.6	107.0
Apr	..	..	..	..	115.7	113.4	106.9	103.6	119.2	111.3	118.2	108.4	107.4
May	..	..	..	..	115.7	113.6	106.9	103.7	118.8	111.3	118.2	108.4	107.7
Jun	..	..	..	..	115.9	..	106.4	103.6	117.1	111.1	118.0	108.1	107.9
1998 <sup>1</sup>													
I	127.4	128.4	134.8	125.3	115.0	112.7	107.2	104.0	119.3	112.0	119.4	108.7	106.7

<sup>1</sup> Preliminary figures for columns 1-4.

## 8.5 Labour, employment and unemployment *(seasonally adjusted figures)*

Period	Labour force participation rate among 15-74 year olds	Labour force	Total employment (4+5) = (6+7+8)	By industrial status			By industry		Unemployed	Unemployment rate
				Self-employed	Wage and salary earners	Agriculture, forestry and fishing	Mining, manufacturing and energy supply	Other industries		
%										
	1	2	3	4	5	6	7	8	9	10
1993	65.3	2 484	2 041	312	1 729	173	424	1 444	444	17.9
1994	64.8	2 480	2 024	312	1 712	167	426	1 430	456	18.4
1995	65.1	2 497	2 068	304	1 764	158	456	1 454	430	17.2
1996	65.0	2 503	2 096	302	1 794	148	459	1 489	408	16.3
1997*	65.7	2 537	2 170	325	1 845	153	463	1 554	367	14.5
1997*										
Jun	64.8	2 506	2 177	328	1 849	156	455	1 566	329	13.2
Jul	64.0	2 471	2 169	328	1 841	155	464	1 550	302	12.2
Aug	64.1	2 478	2 179	330	1 849	148	477	1 554	298	12.1
Sep	64.1	2 474	2 178	319	1 859	144	458	1 577	296	11.9
Oct	63.9	2 468	2 175	327	1 849	154	459	1 561	293	11.9
Nov	64.2	2 485	2 192	332	1 860	146	463	1 583	293	11.8
Dec	64.8	2 510	2 211	329	1 882	150	472	1 589	299	11.9
1998*										
Jan	64.3	2 484	2 196	313	1 883	144	464	1 587	288	11.6
Feb	64.6	2 502	2 205	321	1 885	147	474	1 584	296	11.8
Mar	64.4	2 495	2 192	307	1 886	144	461	1 587	302	12.1
Apr	64.2	2 490	2 195	304	1 891	144	466	1 585	295	11.8
May	65.0	2 528	2 222	315	1 907	138	490	1 593	306	12.1
Jun	64.7	2 515	2 220	317	1 903	143	463	1 614	295	11.8

## 8.6 Central government finances: revenue, expenditure and financial balance,

mill FIM, cash flow basis

During period	Revenue							Expenditure			
	Direct taxes	Indirect taxes	Other taxes and similar revenue	Other revenue	Revenue before financial transactions (1+2+3+4)	Redemptions of loans granted by the state	Revenue before borrowing (5+6)	Consumption	Transfers and subsidies	Of which:	
	1	2	3	4	5	6	7	8	9	10	11
1993	31 667	67 291	1 443	28 823	129 224	7 366	136 593	46 880	108 608	42 720	63 535
1994	34 588	68 124	1 792	24 095	128 599	7 308	135 900	48 750	108 155	40 388	65 519
1995	40 092	66 902	1 720	35 837	144 550	7 923	152 473	51 446	113 644	39 481	67 514
1996	48 357	73 943	1 947	39 778	164 024	9 893	173 918	53 696	110 039	33 199	69 533
1997	52 548	78 273	3 686	38 716	173 223	8 413	181 637	54 596	101 948	30 133	64 125
1997											
Apr	3 808	5 040	219	3 072	12 139	3 262	15 401	4 102	10 571	4 062	5 786
May	5 929	6 399	179	4 036	16 543	1 030	17 573	4 199	8 482	3 687	4 223
Jun	3 928	6 110	260	2 619	12 917	551	13 468	5 440	9 483	3 447	5 304
Jul	4 133	6 519	273	1 522	12 447	1 270	13 717	4 888	1 531	-2 955	3 794
Aug	4 034	6 841	181	1 590	12 646	339	12 985	3 975	6 801	1 363	4 855
Sep	3 869	6 859	178	3 857	14 763	251	15 014	4 611	7 596	2 413	4 575
Oct	3 744	6 392	1 407	1 839	13 382	506	13 888	4 037	9 934	2 409	6 971
Nov	5 733	6 835	201	5 057	17 826	878	18 704	4 616	7 271	2 501	4 507
Dec	4 143	6 770	251	5 918	17 082	28	17 110	6 451	11 394	2 502	8 542
1998											
Jan	3 236	7 632	409	3 000	14 277	80	14 358	5 343	11 871	3 887	5 783
Feb	4 909	7 571	1 264	3 708	17 452	72	17 524	4 035	8 339	3 309	4 607
Mar	4 810	7 442	222	4 527	17 001	3 783	20 783	5 161	6 240	264	5 527
Apr	4 254	5 638	244	4 150	14 286	337	14 623	3 658	8 249	2 570	5 174

During period	Expenditure					Financial balance			
	Fixed investment	Other expenditure	Expenditure before financial transactions (8+9+12+13)	Lending and other financial investment	Expenditure before redemptions of state debt (14+15)	Revenue surplus (5-14)	Net borrowing requirement (7-16)	Net borrowing	Cash surplus (18+19)
	12	13	14	15	16	17	18	19	20
1993	4 306	18 076	177 870	19 753	197 623	-48 646	-61 030	84 036	23 009
1994	3 737	22 281	182 923	17 886	200 760	-54 324	-64 860	73 193	8 336
1995	3 208	26 336	194 635	16 765	211 399	-50 085	-58 926	54 071	-4 854
1996	3 325	29 911	196 972	13 756	210 747	-32 947	-36 828	33 845	-2 983
1997	3 317	24 636	184 497	10 542	195 037	-11 274	-13 400	10 371	-3 028
1997									
Apr	193	3 094	17 960	4 670	22 630	-5 821	-7 229	-2 609	-9 837
May	377	752	13 810	739	14 549	2 733	3 024	3 167	6 191
Jun	203	2 121	17 247	708	17 954	-4 330	-4 486	-3 959	-8 445
Jul	328	1 750	8 497	921	9 417	3 950	4 300	209	4 509
Aug	253	286	11 315	494	11 809	1 331	1 176	-987	189
Sep	326	2 860	15 393	641	16 034	-630	-1 020	8 777	7 757
Oct	297	1 957	16 225	682	16 906	-2 843	-3 018	-3 021	-6 039
Nov	234	734	12 855	589	13 444	4 971	5 260	-3 608	1 651
Dec	590	579	19 014	-286	18 730	-1 932	-1 620	-5 652	-7 271
1998									
Jan	217	3 658	21 089	587	21 676	-6 812	-7 318	417	-6 901
Feb	203	1 165	13 742	453	14 196	3 710	3 328	-2 821	507
Mar	169	7 033	18 603	4 456	23 059	-1 602	-2 276	-3 653	-5 928
Apr	223	5 472	17 602	522	18 124	-3 316	-3 501	-5 358	-8 859

# Notes and explanations to the statistical section

## General

### Source

Unless otherwise stated, the source or compiler of figures is the Bank of Finland.

### Symbols used

*	Preliminary
r	Revised
0	Less than half the final digit shown
.	Logically impossible
..	Data not available
—	Nil
S	Affected by strike
—	Break in series

Owing to rounding of figures, the sum of the individual items in the tables may differ from the total shown.

## Notes and explanations to tables

### 1 The balance sheet of the Bank of Finland

**Table 1.2** *Domestic financial sector.* Term claims on deposit banks, net (Column 12) = bank certificates of deposit held by the Bank of Finland + securities with repurchase commitments + term credits – term deposits. Other claims on financial institutions, net (Column 14) = till-money credits to deposit banks (until May 1993) + bonds + other claims on financial institutions + liquidity credits – call money deposits (until September 1995) – other liabilities to financial institutions.

### 2 The Bank of Finland's operations in the money and foreign exchange markets and the banks' forward exchange position

**Table 2.1** From 2 October 1995, banks fulfil their minimum reserve requirement as a monthly average of deposits. From October 1995, the requirement and deposits are shown for the month during which the requirement is to be fulfilled. Before deposits were shown for the previous month, because deposits were matched with the requirement on the last banking day of that month. The requirement is determined on the basis of the reserve base two months earlier (up to September 1995 one month earlier). The reserve base was changed on 31 March 1995 to comply with the new balance sheet format. Liquidity credits (Column 7): see explanations, Table 3.2.

**Table 2.2** Money market instruments are the instruments used by the Bank of Finland in its money market operations. Matured money market instruments, net, comprise both instruments purchased and sold. Money market transactions are recorded according to trade dates.

**Table 2.3** Foreign exchange transactions are recorded according to trade dates. In addition to spot transactions (Columns 1, 2, 4 and 5) the Bank of Finland's foreign exchange reserves are affected by interest payment and by changes in both the prices of securities and exchange rates. Spot transactions related to forward contracts (Column 4) refer to the combined effects on the foreign

exchange reserves of forward transactions in the form of swaps and maturing forward transactions. The central government's foreign exchange transactions (Column 5) comprise transactions related to drawings and redemptions of government loans and associated interest payments.

**Table 2.4** The markka value of forward contracts is given.

### 3 Rates of interest

**Table 3.1** The interbank overnight rate (Column 1) is weighted using amounts of interbank deposits as weights. Since 1 June 1995, HELIBOR rates (Helsinki Interbank Offered Rate) (Columns 2–5) have been calculated on the basis of the bid rates (offered rates for funds) quoted for their own certificates of deposit by all the banks that have been accepted by the Bank of Finland as counterparties in money market operations. An additional condition is that a bank gives regular quotations. The highest and lowest rates quoted for each maturity are omitted and an arithmetic average calculated for the remaining rates. The quotations are taken daily at 1 p.m.

**Table 3.2** The Bank of Finland's tender rate (Column 1) is determined in tenders held by the Bank of Finland, in which the banks are asked to make bids or offers for money market instruments with a maturity of one month. The tender rate is the weighted average of accepted bids or offers, expressed as a simple annual interest rate. If, when requesting bids or offers, the Bank of Finland announces an acceptable interest rate (fixed-rate tender), the tender rate is the same as the rate announced by the Bank. The monthly and annual values for the tender rate are the arithmetic means of calendar day figures.

Credit institutions which are subject to the minimum reserve requirement and maintain a current account with the Bank of Finland may obtain liquidity credit to cover overdrafts and to fulfil their minimum reserve requirement. They can obtain liquidity credit with a maturity of 1 day, 7 days, 14 days, 21 days or 28 days. The maturity of liquidity credit is determined by the Bank of Finland. The rate of interest on liquidity credit is obtained by adding together the Bank of Finland's tender rate and the interest rate margin for liquidity credit. The call money deposit rate in use prior to October 1995 was obtained by subtracting the interest rate margin for call money deposits from the Bank of Finland's tender rate. Since 2 October 1995, the monthly average of a bank's call money deposits exceeding the minimum reserve requirement has been treated as excess reserve. The interest rate paid on excess reserves is determined separately by the Bank of Finland. The values for maturity and interest rate margins are the last values recorded in each period.

**Table 3.3** The rates shown are based on the lending rates quoted for the respective currencies in the Euro-market. ECU (Column 1): the weights of the ECU basket. 3 currencies (Column 2): DEM 60, USD 30 and GBP 10 per cent.

**Table 3.4** *Lending.* New credits (Columns 1–4): rates of interest on new credits drawn during the month are average monthly rates weighted by loan amounts. Annual rates are arithmetic average of monthly observations until 1987 after which they are weighted by loan amounts. Average lending rates (Columns 5 and 6) are all weighted by

loan amounts. As from January 1989, the loans of Postipankki Ltd have been included in the commercial banks' outstanding stock of loans. *Deposits.* 24-month and 36-month tax-exempt deposits (Columns 7 and 8): from May (September) 1992, 24-month (36-month) deposits are tax-exempt if they carry a rate of interest which is at most the Bank of Finland's base rate less two percentage points (one percentage point). In the period from January 1989 to April 1992, 24-month deposits (Column 7) were tax-exempt if they carried a rate of interest which was at most the Bank of Finland's base rate less one percentage point. Other tax-exempt deposits (Column 9): in the period from January 1989 to April 1992, deposits other than 24-month deposits were tax-exempt if they carried a rate of interest which was at most the Bank of Finland's base rate less 4 percentage points. From May 1992, deposits other than 24-month or 36-month deposits are tax-exempt if they carry a maximum rate of interest as prescribed by law. The maximum rate was first set at 4.5 per cent. From May 1993 until November 1993 it was 2.5 per cent and thereafter 2.0 per cent. All markka deposits (Column 10): the stock of deposits comprises all markka deposits by the public. The monthly and annual average rates of interest are weighted by deposit amounts. Other funding (Column 11): CDs outstanding + promissory notes + bonds. The average rate of interest is weighted by amounts. Total markka funding (Column 12); markka deposits by the public + banks' other markka funding. The rate of interest is weighted by amounts.

**Table 3.5** Reference rates (Columns 1 and 2) are calculated by the Bank of Finland as the monthly averages of the offered rates for taxable, fixed-rate bonds quoted daily by the five largest banks. The yields on five-year and ten-year government bonds (Columns 3 and 4) are calculated by the Bank of Finland as averages of the bid rates quoted daily by the primary dealers. As from 1 July 1998 the five-year yield is based on quotations for a fixed-rate bullet serial bond (1/93, 15 March 1993 – 15 March 2004). As from 24 November 1997 the ten-year yield is based on quotations for a fixed-rate bullet serial bond (1/97, 25 April 1997–2008). The share yield (Column 5) is the weighted effective yield on shares quoted on the Helsinki Stock Exchange. Source: Statistics Finland.

#### 4 Rates of exchange

**Table 4.2** FIM/ECU (Column 1): The markka value of the ECU is calculated as the sum of the dollar amounts of the currencies in the ECU valued at current market rates quoted daily at noon Finnish time. The markka was floated on 8 September 1992, continuing until 14 October 1996, when it was joined to the EU's Exchange Rate Mechanism (ERM) at the central rate of 5.80661 per ECU. As from 16 March 1998 the ECU central rate is FIM 6.01125. Trade-weighted currency index (Column 2): The weights are moving averages of the shares of (currently) 16 countries in Finland's foreign merchandise trade (only convertible currencies are included). The payments currency index (Column 3): The weights are moving averages of shares of payments currencies (16 convertible currencies) in Finland's foreign trade.

**Table 4.3** The table shows the deviations of the markka's market exchange rate (markka value of the foreign currency) as a percentage of the ERM central rate for each currency. A plus (+) indicates that the markka is weaker than its central rate value against the other currency; the intervention limit is (central rate) +16.121 per cent. A minus (-) indicates that the markka is stronger than its central rate value against the other currency; the intervention limit is (central rate) -13.881 per cent.

#### 5 Financial markets and money supply

**Table 5.1** The public comprises all entities except the central government, deposit banks and the Bank of Finland. Markka deposits are classified according to tax treatment. The tax status (exempt vs subject to withholding tax) of deposits held by households and estates is determined by the rate of interest. Time deposits that are tax-exempt under income tax law (maximum interest rate: 2 per cent) were transferred in connection with a statistical revision from other deposits (column 3) to time deposits (column 2) at the start of 1997. The remaining traditional 24- and 36-month tax-exempt deposits matured in 1996 and 1997 as the law on deposits tax relief expired. The withholding tax is a final tax collected at source by banks in connection with the payment of interest. Deposits under 'Other taxable' (columns 8–10) are held by entities other than households and estates, ie mostly by enterprises and local governments, and interest earned on them is taxed as ordinary income. Other markka funding (column 13) comprises CDs issued by banks, money market promissory notes and repo sales. The figures for bank CDs include only CDs held by entities other than banks, the Bank of Finland and the central government.

**Table 5.2** The public comprises all entities except the central government, deposit banks and the Bank of Finland. Loans granted from central government funds are not included in markka lending. Banks' markka lending to the foreign sector (column 6) comprises foreign economic units located in Finland, eg foreign embassies, consulates and units of international organizations. As from 1 Jan 1997 lending to these entities is no longer included in domestic lending, pursuant to the new classification of institutional sectors. The breaks in series at end-1996 are due to the statistical revision. Since the revision, these columns do not include lending by foreign branches of Finnish deposit banks nor do columns 1–7 and 9 any longer include bonds, debentures and other bearer instruments held by banks and classified as investment assets.

**Table 5.3** Foreign assets, net (Column 1) = the Bank of Finland's foreign claims + banks' foreign claims (incl. foreign claims of banks' foreign branches) – the Bank of Finland's foreign liabilities – banks' foreign liabilities (incl. foreign liabilities of banks' foreign branches). *Domestic credit.* Claims on the central government, net (Column 2) = the Bank of Finland's claims on the central government + banks' claims on the central government – the central government's deposits with the Bank of Finland and Postipankki – loans granted from state funds through banks. Claims on the public (incl. local government), (Column 3) = the Bank of Finland's claims on the private sector + banks' claims on the private sector (loans to the public, bonds and debentures (excl. government bonds and bank debentures), claims on other financial institutions, shares held by banks). Other items, net (Column 5) = capital accounts and other items of the Bank of Finland (incl. private sector time deposits with the Bank of Finland) + capital accounts of deposit banks + unclassified assets and liabilities of deposit banks, net (bank debentures, bank CDs held by the public, other market funding and foreign currency deposits by the public).  $M_1$  (Column 6) = currency in circulation – banks' till money + markka cheque and postal giro account deposits and transactions account deposits held by the public.  $M_2$  (Column 7) =  $M_1$  + quasi-money (markka time deposits held by the public, excl. deposits with the Bank of Finland).  $M_3$  (Column 8) =  $M_2$  + bank CDs held by the public.

**Table 5.4** Source: State Treasury Office. Other foreign currency-denominated debt (Column 2) consists of other bonds and debentures and long-term promissory notes. Other bonds and debentures are so-called private placings; long-term promissory notes are bank loans. Miscellaneous items (Column 7) consist of two minus items, the liability to the State Pension Fund and the liability to the State Fund for Nuclear Waste Disposal, which are intragovernmental debts. In the September 1997 issue of the Bulletin, columns 7, 8 and 9 were retroactively revised for the whole period shown. Outstanding lending (Column 10) comprises the stock of loans granted from the central government budget and from extra-budgetary funds. Cash funds (Column 11) comprise the cash funds held in central government accounting offices, funds held in cheque and postal giro accounts, as well as placements of central government cash funds. The main part of the latter is reserved for covering transferable allocations budgeted in previous years.

**Table 5.5** Sources: Table A: Financial Supervision from the beginning of 1994. Table B: Statistics Finland. Table C: Finnish Central Securities Depository from 1 August 1997. Tables A and B include markka-denominated bonds issued by Finnish issuers in Finland and abroad as well as those issued by foreign issuers in Finland. As from 15 January 1997 the following act as primary dealers: Alfred Berg Finland, Den Danske Bank, Evli Fixed Income Securities, Goldman Sachs International, Merita Bank, Okobank, Postipankki, Skandinaviska Enskilda Banken, Svenska Handelsbanken AB (publ) and Unibank A/S. Customers include all parties other than primary dealers.

**Table 5.6** Source: The Helsinki Stock Exchange. The table has been expanded to take into account the change in the Helsinki Stock Exchange classification of listed companies as from the start of 1997. Column 3 now includes only insurance.

## 6 Balance of payments, foreign assets and liabilities

**Table 6.1** The figures for the trade and goods and services accounts are compiled in accordance with the System of National Accounts. The figures for investment income and expenditure (Columns 7 and 16) include reinvested earnings on direct investment. Preliminary data on reinvested earnings in the previous year have been included in the current account figures (the annual figure is divided evenly between quarterly figures).

**Tables 6.2–6.4** Since the beginning of 1994, the former capital account of Finland's balance of payments has been compiled according to the IMF's new recommendations (IMF Balance of Payments Manual, Fifth Edition, 1993).

**Table 6.2** The capital account (Columns 1 and 14) reflects unrequited capital transfers such as forgiven debts and aid from EU funds.

In the financial account financial derivatives include payments arising from currency and interest rate swaps related to loans, ie outstanding loans are recorded according to the original loan contract. Medium-term notes (MTNs) are included under bonds (Columns 4 and 17). The category other investment (Columns 9–12 and 21–24) covers transactions related to trade credits, loans, currency and deposits and other assets and liabilities. Transactions in assets and liabilities related to short- and long-term supplier credits and advance payments related to imports and exports are recorded under trade credits (Columns 9 and 21). The item 'Other capital' (Columns 11 and 23) in-

cludes transactions in currency and deposits and short- and long-term assets and liabilities of different sectors not covered by any of the items above. In addition, this category includes changes in the central government's subscriptions to and quotas in international organizations as well as transactions in the Bank of Finland's short- and long-term assets and liabilities (excl. reserve items). The most important sub-item under the item 'other capital' comprises banks' other short-term assets and liabilities (in practice interbank deposits). The central bank's reserve assets (Column 26) comprise gold, special drawing rights (SDRs), the reserve position in the IMF, ECU-claim on the ECB and foreign exchange assets. A negative figure implies an increase in reserves.

**Table 6.3** The data are classified as in Table 6.2. The items have been translated into markkaa using the spot rates for each date; thus the figures include the impact of changes in exchange rates.

**Table 6.4** This contains data on Finland's net international investment position (assets less liabilities) classified by sector.

As of January 1998, Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

## 7 Foreign trade

Source: The National Board of Customs (except for table 7.2). All tables refer to foreign trade in goods.

**Table 7.2** The volume indices (Columns 1 and 2) are calculated from the export and the import values, deflated by the price indices (Columns 3 and 4). Deflation and seasonal adjustments are carried out by the Bank of Finland. The export and the import price indices are provided by Statistics Finland. The terms of trade (Column 5) is the ratio of the export price index to the import price index, multiplied by 100.

**Table 7.4** In addition to all EU countries, those countries are listed whose shares of Finland's exports are at least 1 per cent.

## 8 Domestic economic developments

**Tables 8.1 – 8.5** Source: Statistics Finland. Seasonal adjustment for tables 8.1 and 8.2 is provided by Statistics Finland, for tables 8.3 and 8.5 by the Bank of Finland.

**Table 8.2** Volume index of industrial production has been revised. The new base year is 1995 = 100. Industrial classification has also been slightly revised. The indices are adjusted for the number of working days in each month. This causes small differences in the annual averages from the corresponding unadjusted figures.

**Table 8.3** The indices of wholesale and retail trade (Columns 1 and 2) are seasonally adjusted by Statistics Finland. The monthly GDP indicator (Column 7) is a weighted index of 11 readily available output indicators for various industries.

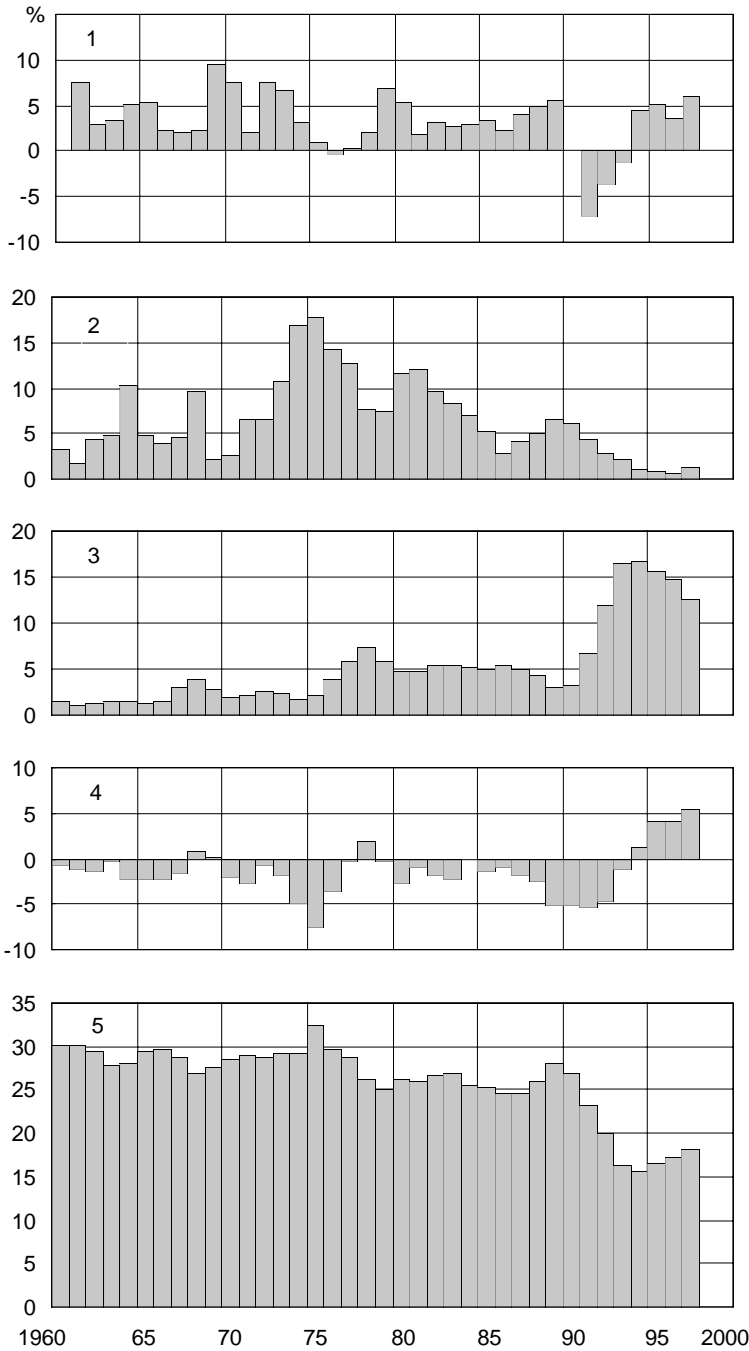
**Table 8.4** The indicator of underlying inflation (Column 6) is the consumer price index from which the effect of indirect taxes, subsidies and housing-related capital costs (house prices and mortgage interest payments) has been removed (see the article by Pentti Pikkarainen and Timo Tyrväinen in the June – July 1993 issue of the Bulletin). Statistics Finland calculates the indicator and publishes it together with the consumer price index on the 15th of every month (or the next business day). It is lagged by one month in comparison with the consumer price index.

**Table 8.6** Source: Ministry of Finance.

1. Long-term indicators	S30
2. The Bank of Finland's foreign exchange reserves and forward position	S31
3. Forward market	S31
4. Interest rates set by the Bank of Finland	S31
5. Banks' liquidity position at the Bank of Finland	S32
6. Liquidity management interest rates	S32
7. HELIBOR interest rates, daily	S32
8. HELIBOR interest rates, monthly	S33
9. Bond yields	S33
10. Differential between Finnish and German interest rates	S33
11. Differential between German and selected EU-countries' 10-year interest rates	S34
12. ERM exchange rates: deviation from DEM central parity	S34
13. ERM exchange rates: deviation from DEM central parity	S34
14. Bank of Finland currency index and markka value of the ECU	S35
15. Daily spot rates for the markka against the Deutschemark and US dollar	S35
16. Daily spot rates for the markka against the pound sterling and Swedish krona	S35
17. Monthly spot rates for the markka against the Deutschemark and US dollar	S36
18. Monthly spot rates for the markka against the pound sterling and Swedish krona	S36
19. Banks' markka lending rates and markka funding rates	S36
20. Bank funding from the public	S37
21. Bank lending to the public	S37
22. Money supply	S37
23. Current account	S38
24. Balance of payments	S39
25. Net interest and dividend expenditure	S40
26. Finland's net international investment position	S40
27. Share market	S40
28. Foreign trade	S41
29. Foreign trade: prices and terms of trade	S41
30. Finland's export performance	S41
31. Production	S42
32. Fixed investment	S42
33. Employment and the unemployment rate	S43
34. Prices and wages	S43
35. Central government finances	S44
36. Central government debt	S44

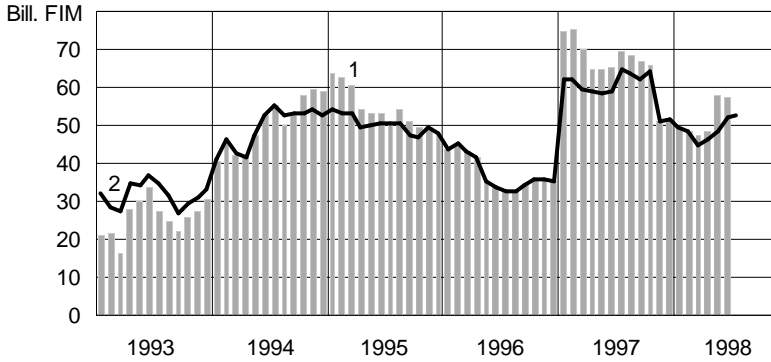


## 1. Long-term indicators



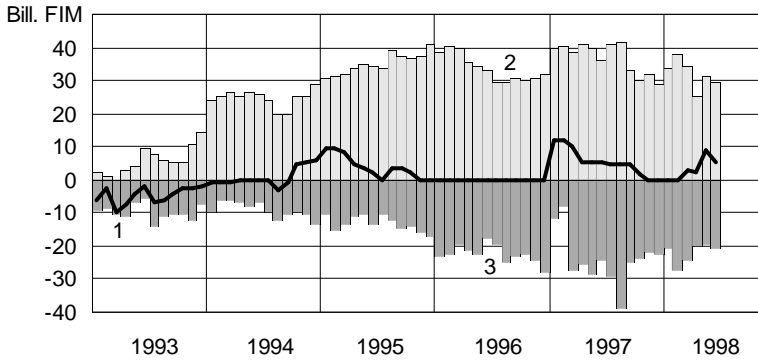
1. GDP, change in volume from the previous year, per cent
2. Consumer prices, change from the previous year, per cent
3. Unemployment rate, per cent
4. Current account, as a percentage of GDP
5. Fixed investment, as a percentage of GDP

## 2. The Bank of Finland's foreign exchange reserves and forward position



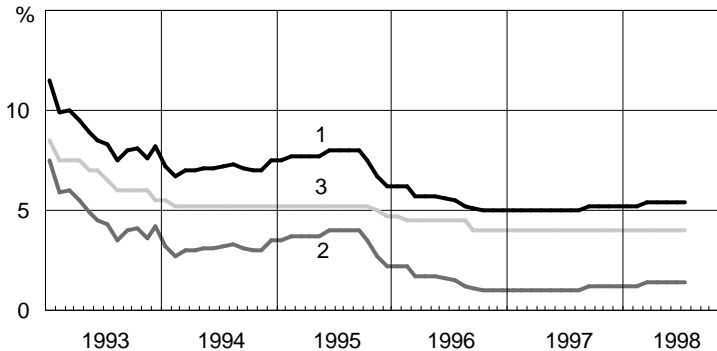
1. Foreign exchange reserves plus forward position
2. Foreign exchange reserves

## 3. Forward market



1. Forward exchange purchased by the Bank of Finland
2. Forward exchange sold to banks by domestic customers
3. Forward exchange sold to banks by foreign customers

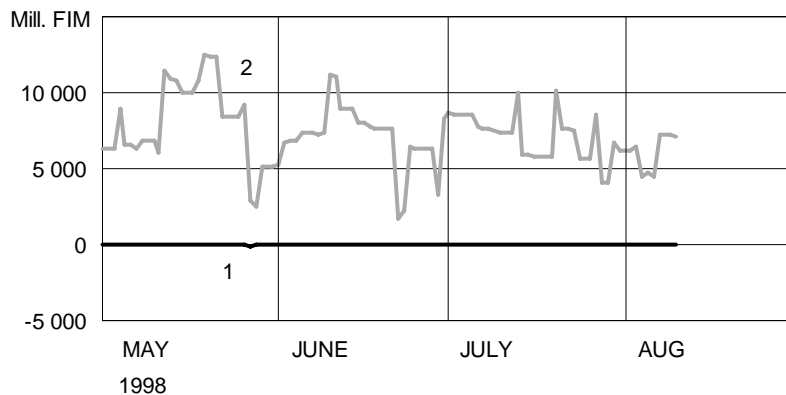
## 4. Rates of interest set by the Bank of Finland



1. Liquidity credit rate (up to 2 July 1992 call money credit rate)
2. Excess-reserve rate (call money deposit rate until 2 October 1995)
3. Base rate

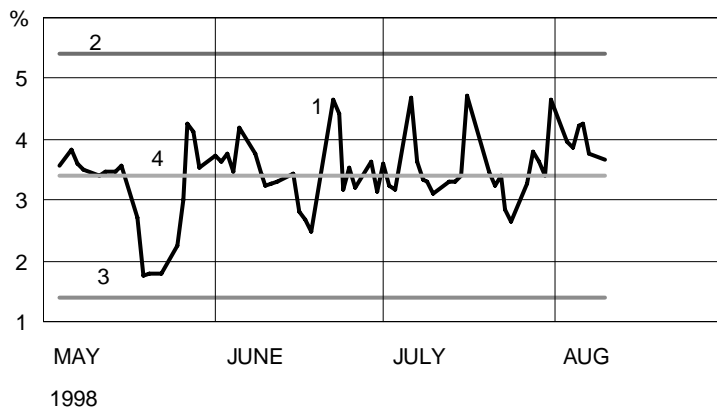
End-of-month observations

## 5. Banks' liquidity position at the Bank of Finland



1. Liquidity credits (-)
2. Reserve deposits

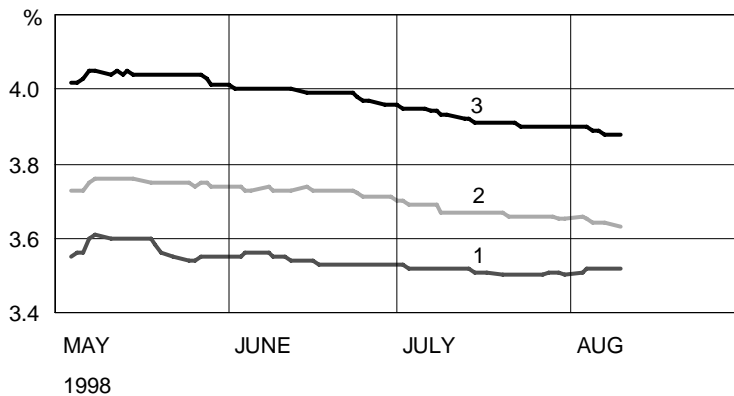
## 6. Liquidity management interest rates



1. Inter-bank overnight rate
2. Liquidity credit rate
3. Excess-reserve rate
4. Tender rate

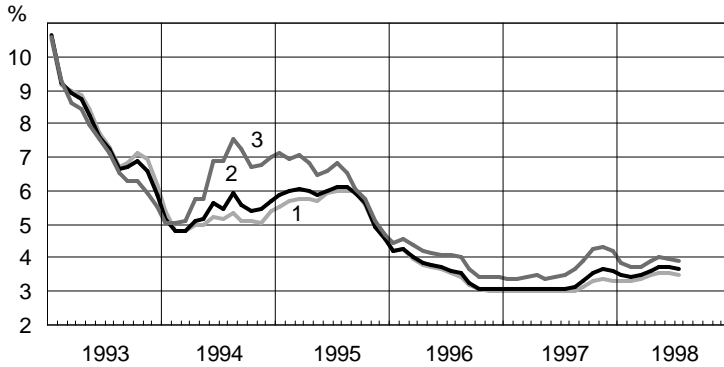
Daily observations

## 7. HELIBOR rates of interest, daily



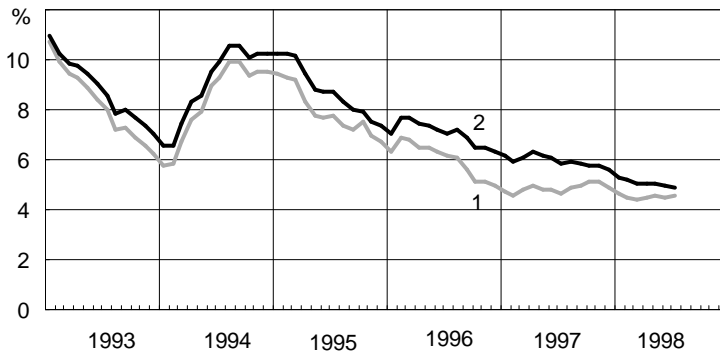
1. 1-month HELIBOR
2. 3-month HELIBOR
3. 12-month HELIBOR

## 8. HELIBOR interest rates, monthly



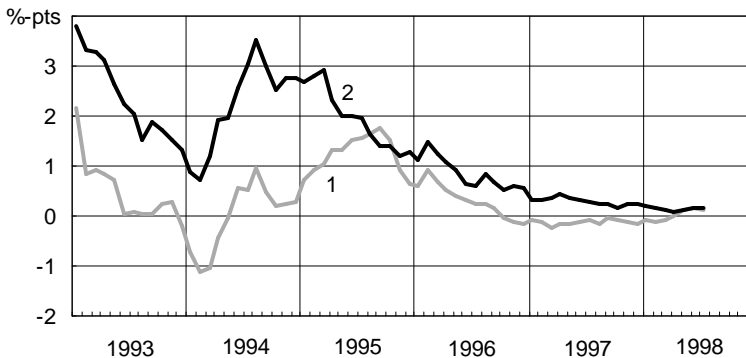
1. 1-month HELIBOR
2. 3-month HELIBOR
3. 12-month HELIBOR

## 9. Bond yields



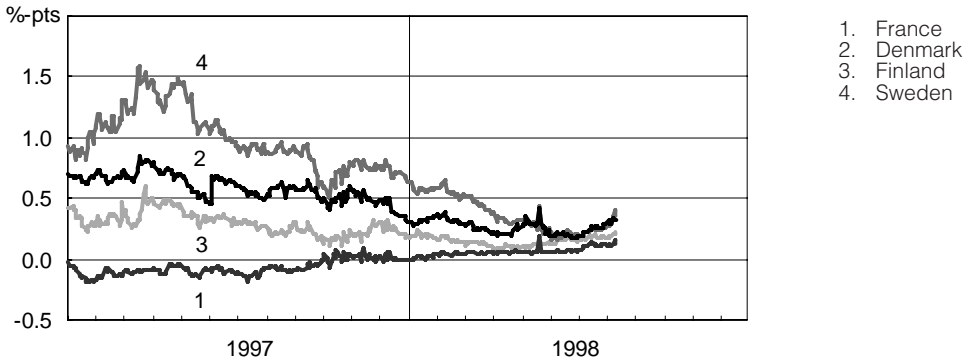
1. Yield on 5-year government bonds
2. Yield on 10-year government bonds

## 10. Differential between Finnish and German interest rates

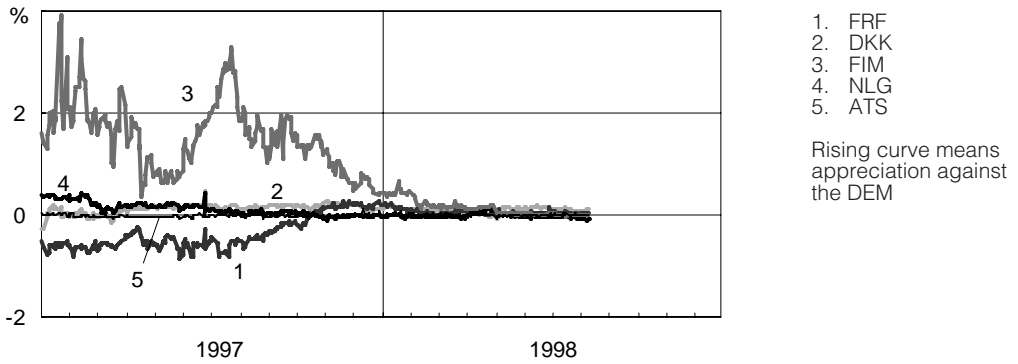


1. 3-month HELIBOR minus 3-month DEM eurorate
2. 10-year Finnish government bond yield minus 10-year German government bond yield

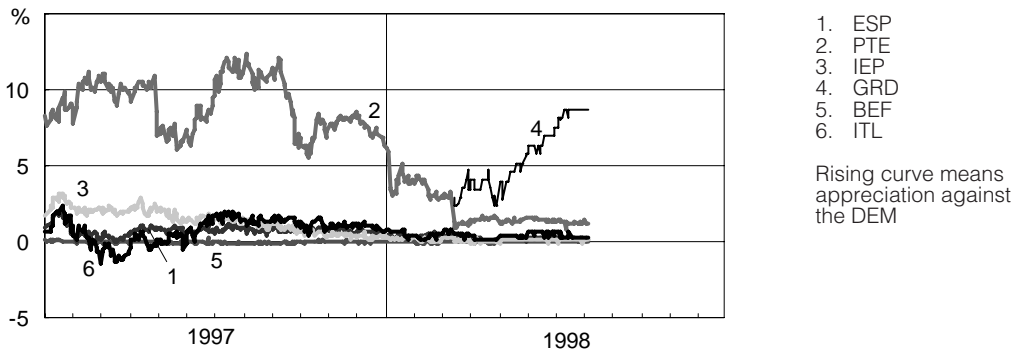
### 11. Differential between German and selected EU-countries' 10-year interest rates



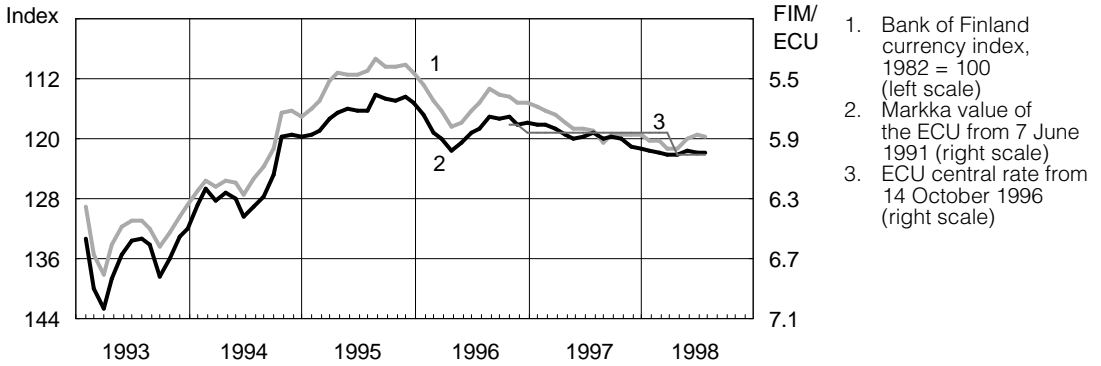
### 12. ERM exchange rates: deviation from DEM central parity



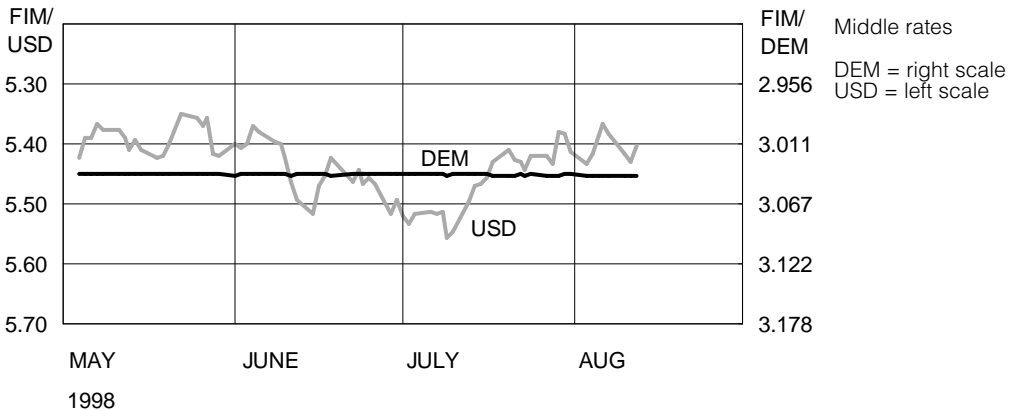
### 13. ERM exchange rates: deviation from DEM central parity



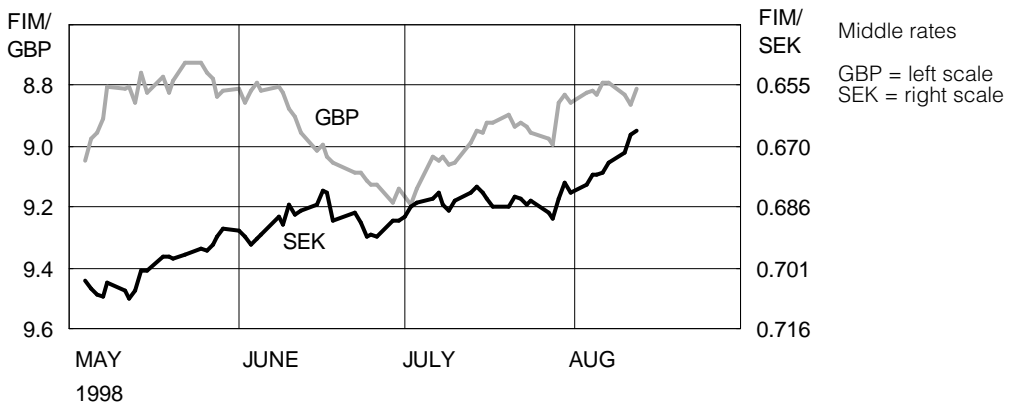
#### 14. Bank of Finland currency index and markka value of the ECU



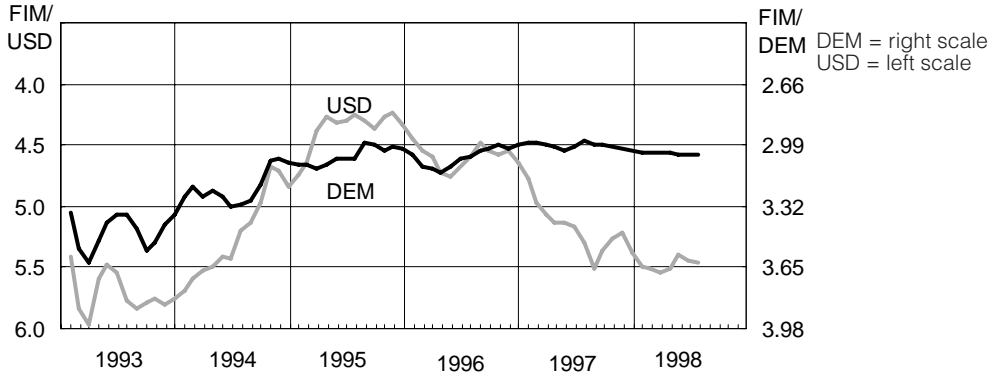
#### 15. Daily spot rates for the markka against the Deutschmark and US dollar



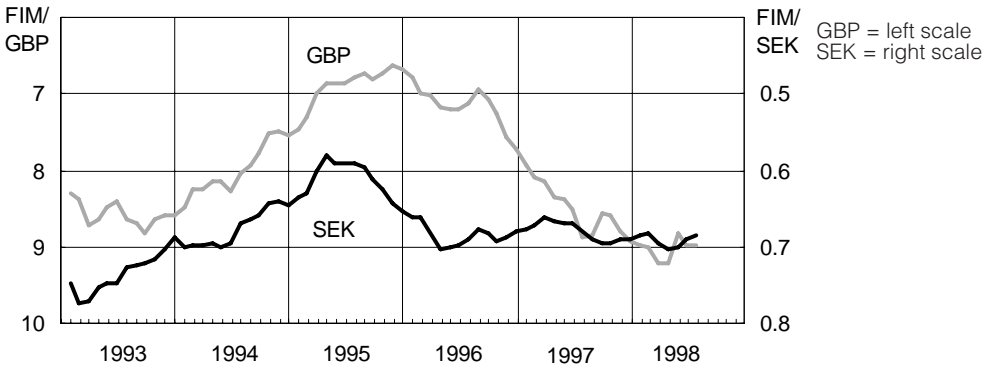
#### 16. Daily spot rates for the markka against the pound sterling and Swedish krona



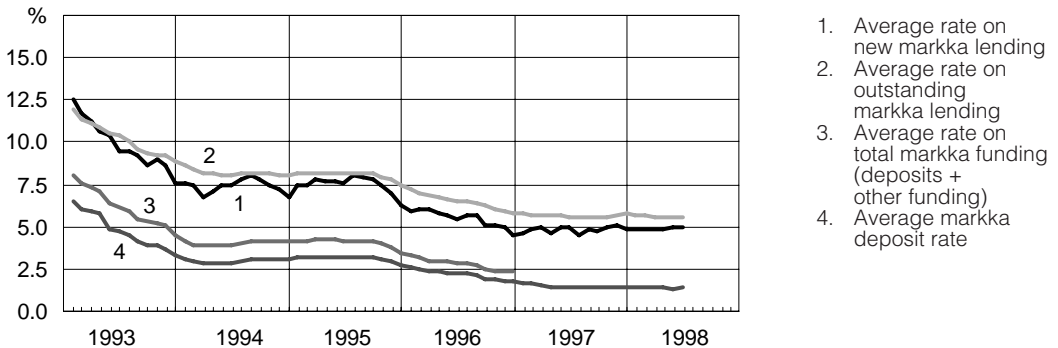
### 17. Monthly spot rates for the markka against the Deutschemark and US dollar



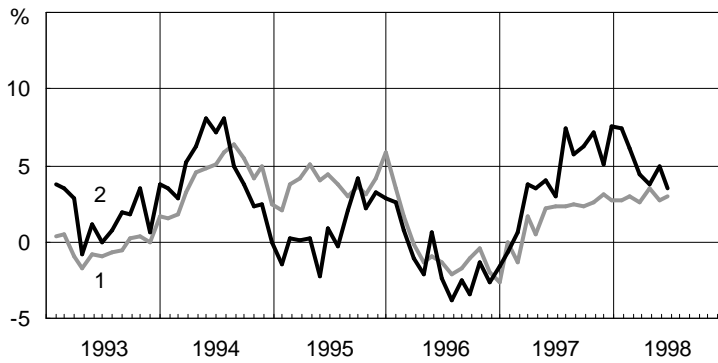
### 18. Monthly spot rates for the markka against the pound sterling and Swedish krona



### 19. Banks' markka lending rates and markka funding rates



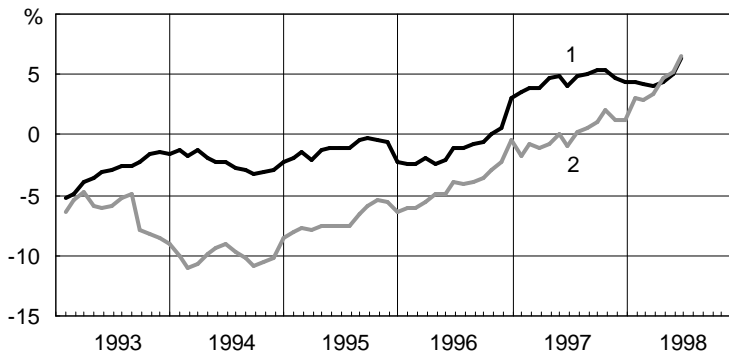
## 20. Bank funding from the public



1. Markka deposits
2. Total funding

Change from the corresponding month of the previous year, per cent

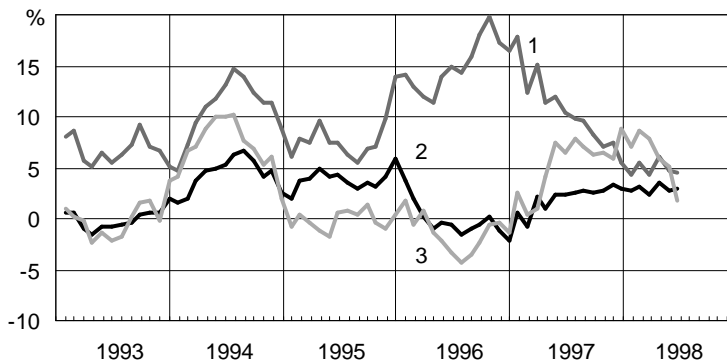
## 21. Bank lending to the public



1. Markka lending
2. Total lending

Change from the corresponding month of the previous year, per cent

## 22. Money supply



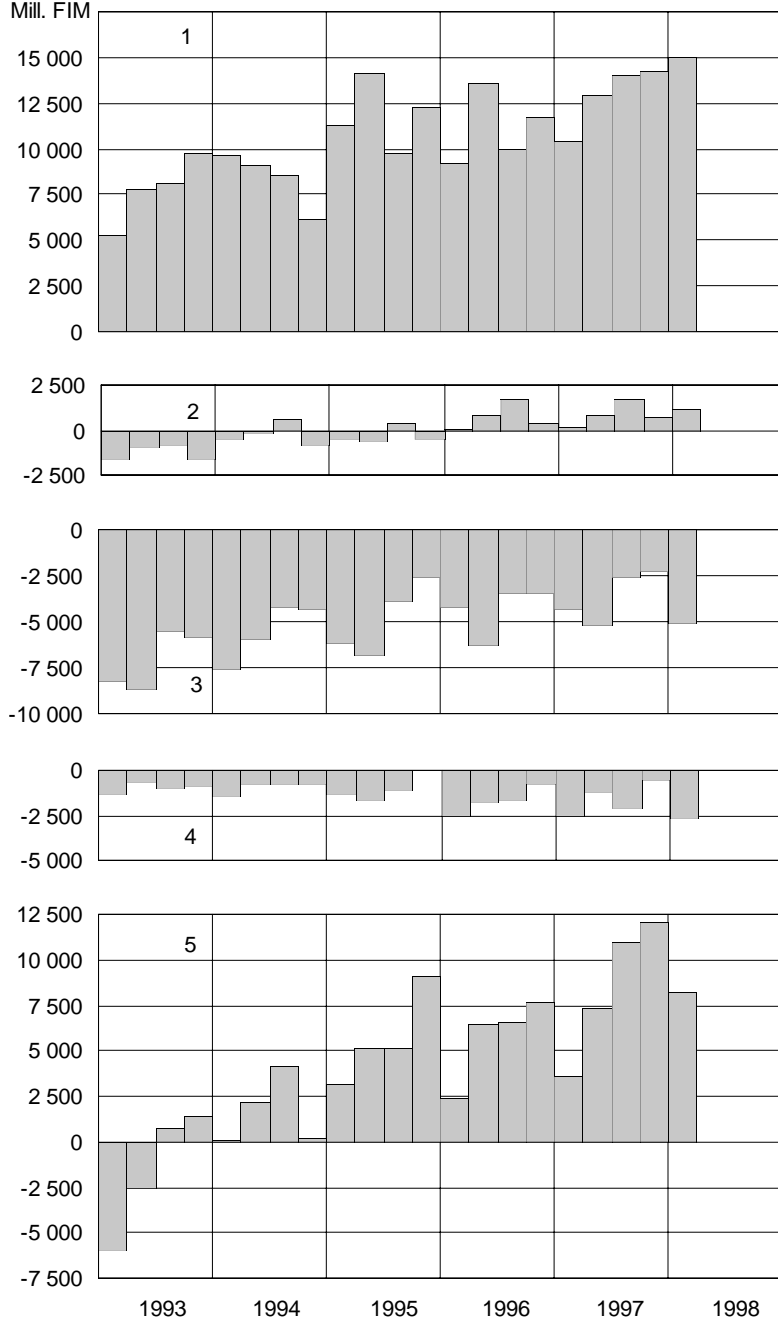
1. Narrow money (M1)
2. Broad money (M2)
3. M2 + bank CDs held by the public (M3)

Change from the corresponding month of the previous year, per cent



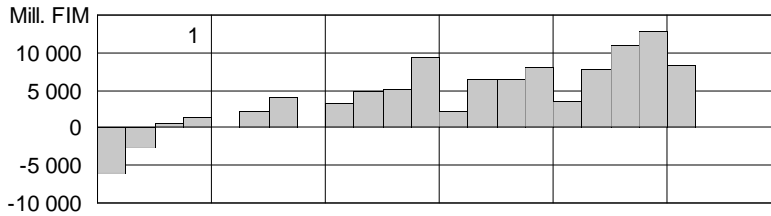
## 23. Current account

Mill. FIM

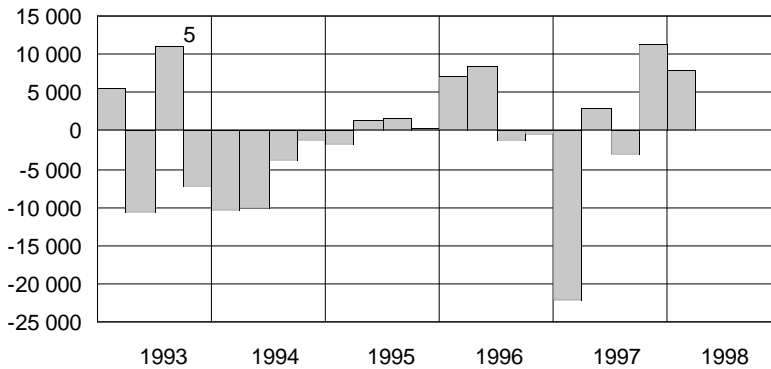
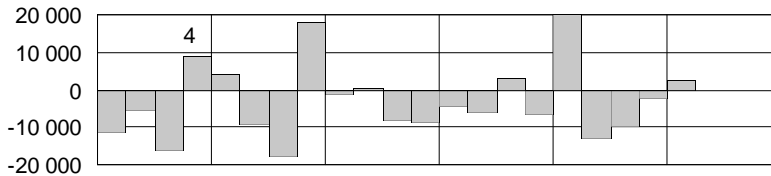
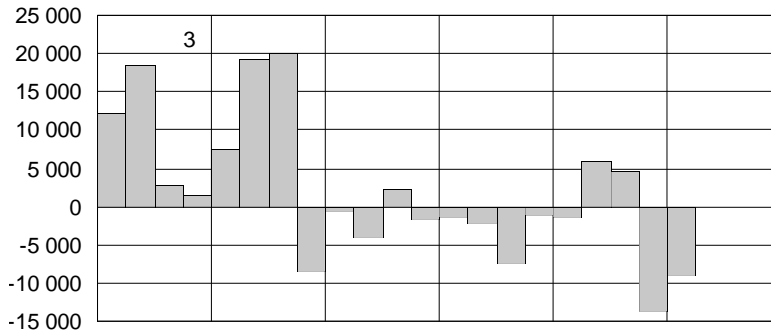
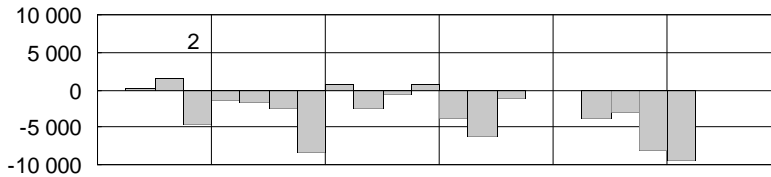


1. Trade account
2. Services account
3. Investment income account
4. Unrequited transfers account and other items, net
5. Current account

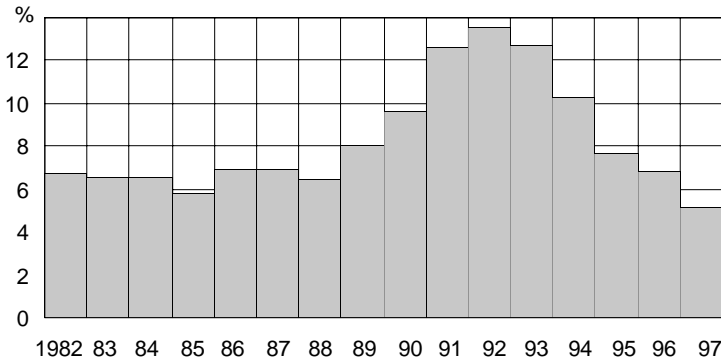
## 24. Balance of payments



1. Current and capital account
2. Direct investment
3. Portfolio investment
4. Other investment
5. Change in central bank's reserve assets (increase = -)

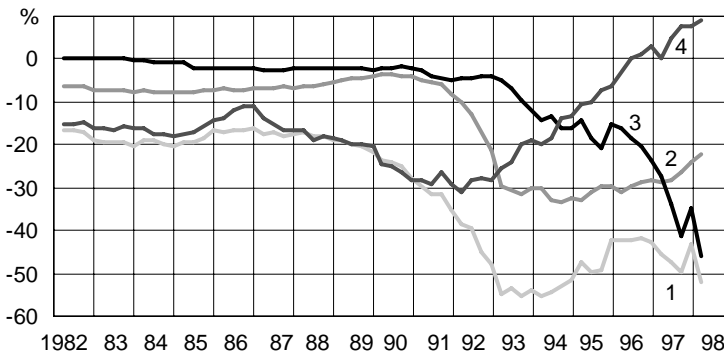


## 25. Net interest and dividend expenditure



As per cent of current account receipts

## 26. Finland's net international investment position

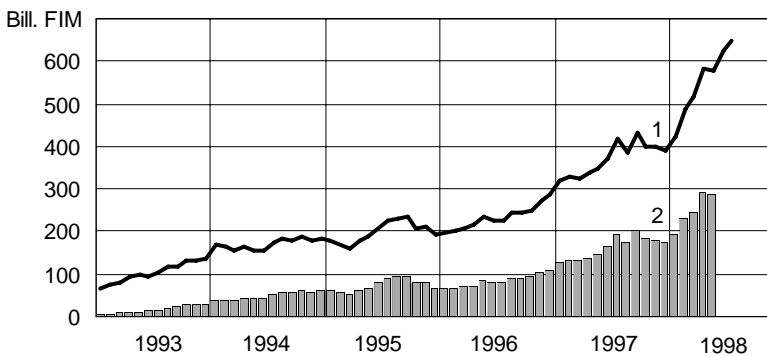


As a per cent of GDP

1. Total NIIP
2. Central government (in foreign currencies)
3. Government and other markka-denominated securities
4. Other, net (excl. Bank of Finland's foreign reserve assets)

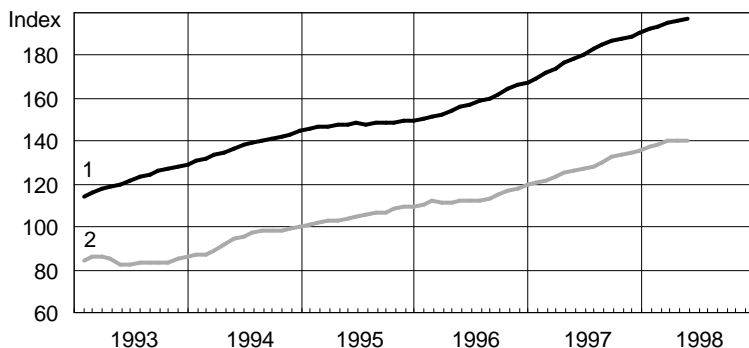
Finland's net international investment position (NIIP) is expressed as external assets less external liabilities.

## 27. Share market



1. Market capitalization of listed shares
2. Non-residents' holdings of Finnish shares

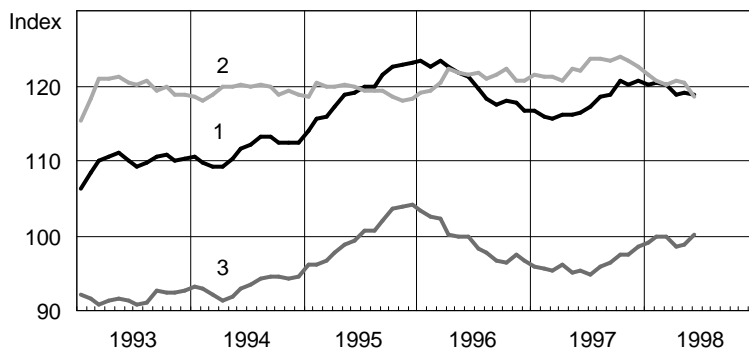
## 28. Foreign trade



1. Exports of goods
2. Imports of goods

Volume index, 1990 = 100, trend

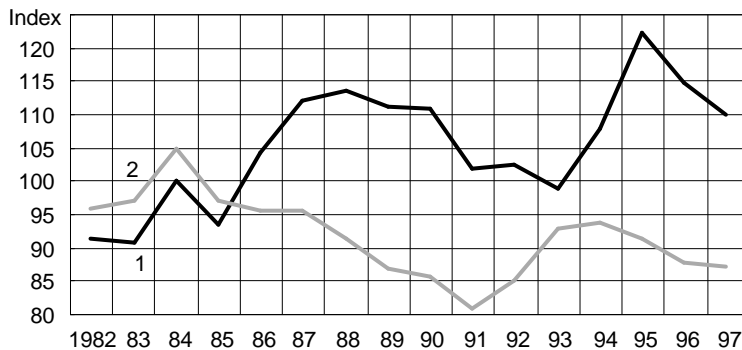
## 29. Foreign trade: prices and terms of trade



1. Export prices
2. Import prices
3. Terms of trade

Index 1990 = 100

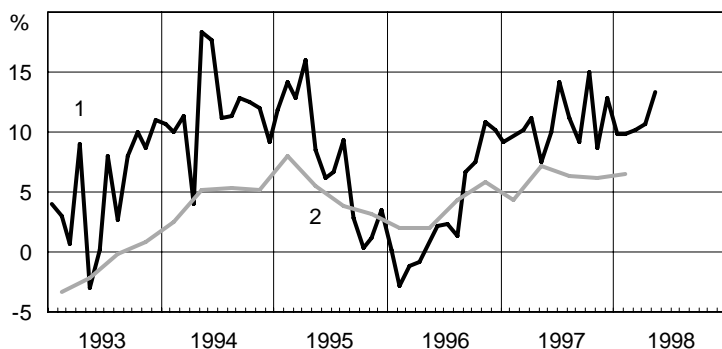
## 30. Finland's export performance



1. Value of exports to OECD countries in relation to imports of OECD countries
2. Volume of exports to OECD countries in relation to imports of OECD countries

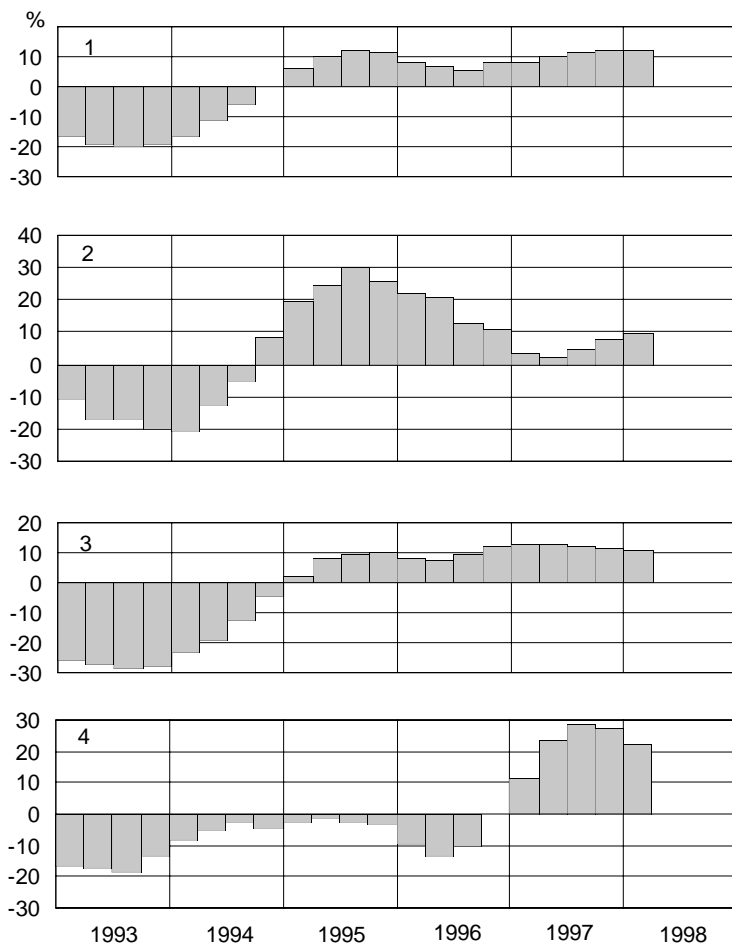
1980 = 100

### 31. Production



1. Industrial production, change in volume from the corresponding month of the previous year, per cent
2. GDP, change in volume from the corresponding quarter of the previous year, per cent

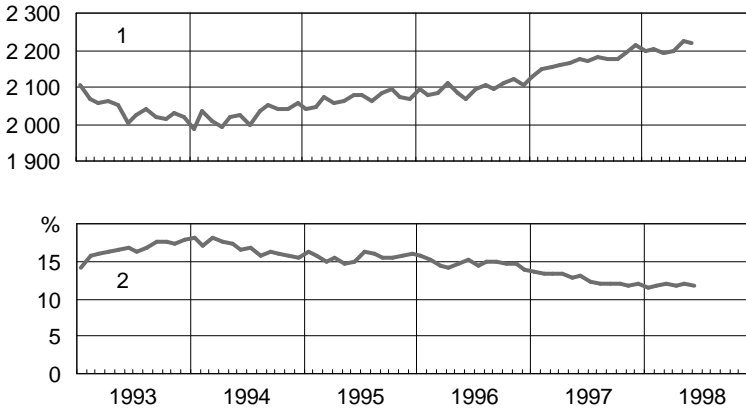
### 32. Fixed investment



1. Total fixed investment
2. Investment in machinery and equipment
3. Building investment, excl. residential buildings
4. Residential buildings

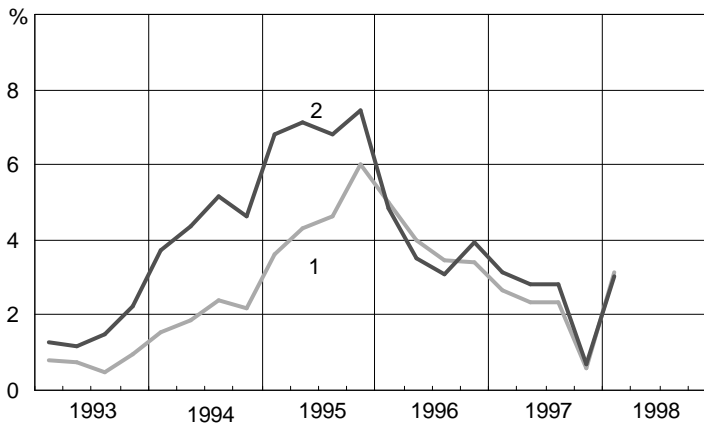
Four-quarter volume change calculated from four-quarter moving totals and plotted at the last quarter, per cent

### 33. Employment and the unemployment rate



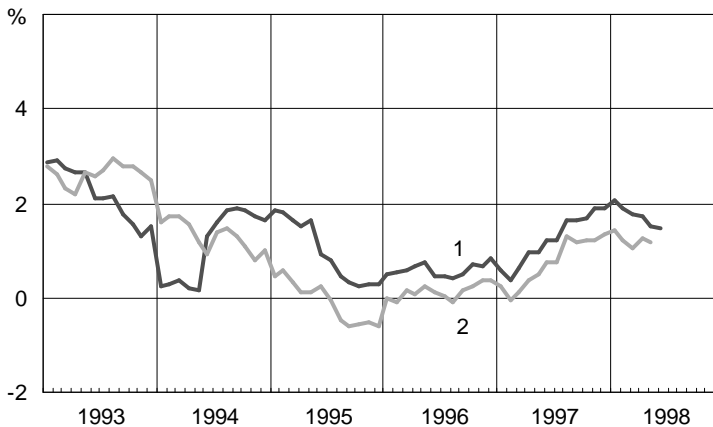
1. Employment, 1000 persons
2. Unemployment rate, per cent

### 34. Prices and wages



1. Index of wage and salary earnings, all wage and salary earners
2. Index of wage and salary earnings, manufacturing workers

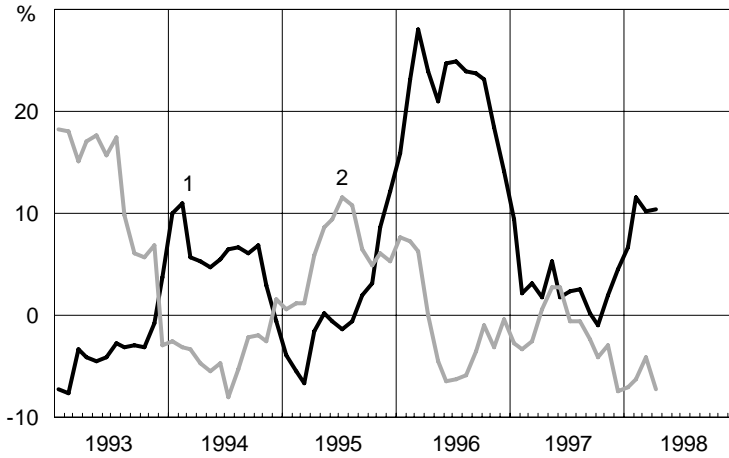
Change from the corresponding quarter of the previous year, per cent



1. Consumer price index
2. Indicator of underlying inflation

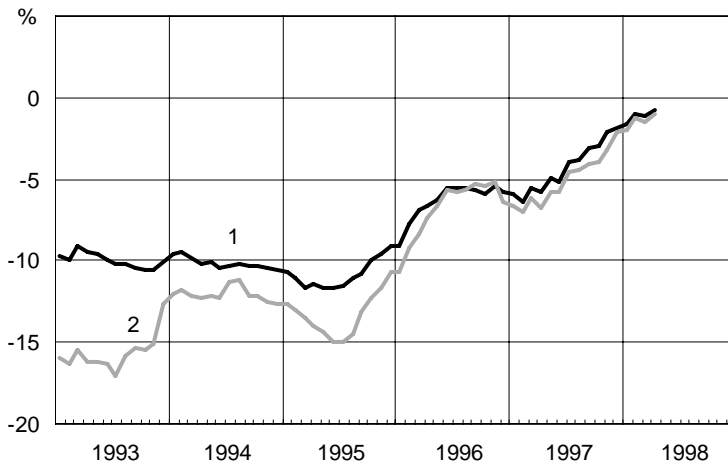
Change from the corresponding month of the previous year, per cent

### 35. Central government finances



1. Revenue excl. borrowing
2. Expenditure excl. redemptions of central government debt

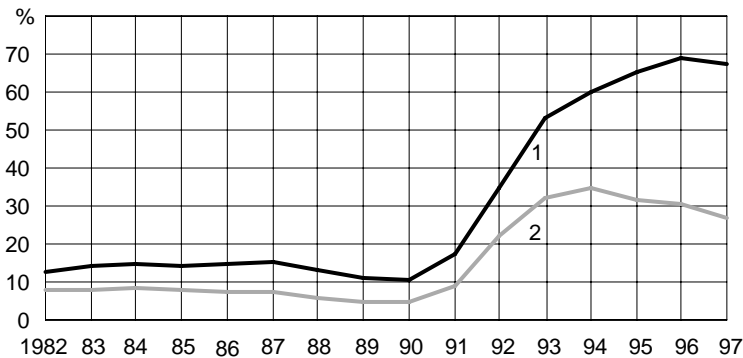
12-month changes calculated from 12-month moving totals and plotted at the last month, per cent



1. Revenue surplus (revenue less expenditure excl. financial transactions) (surplus = +)
2. Net borrowing requirement (net borrowing = -)

12-month moving total as a percentage of GDP, plotted at the last month

### 36. Central government debt



1. Total debt
2. Of which: foreign currency-denominated debt

As a percentage of GDP

# BANK OF FINLAND

5 June 1998

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## THE PARLIAMENTARY SUPERVISORY COUNCIL

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ILKKA KANERVA, Chairman  
JOHANNES KOSKINEN, Vice Chairman  
OLAVI ALA-NISSILÄ

KIMMO SASI  
TUULIKKI HÄMÄLÄINEN  
MAURI PEKKARINEN

VIRPA PUJSTO  
MARTTI KORHONEN  
ANNELI JÄÄTTEENMÄKI

ANTON MÄKELÄ, Secretary to the Parliamentary Supervisory Council

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## THE BOARD

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MATTI VANHALA, Chairman  
ESKO OLLILA

MATTI LOUEKOSKI  
MATTI KORHONEN

HEIKKI T. HÄMÄLÄINEN, Secretary to the Board

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## DIRECTOR

---

PENTTI KOIVIKKO

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## DEPARTMENTS AND OTHER UNITS

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Accounting ESA OJANEN, in addition to own duties

Administration URPO LEVO

Communications ANTTI JUUSELA

Economics ANTTI SUVANTO

Financial Markets HEIKKI KOSKENKYLÄ,  
Adviser to the Board: RALF PAULI

Information Services MARTTI LEHTONEN

Information Technology PERTTI SIMOLA

Internal Audit TAINA KIVELÄ

International Secretariat KJELL PETER SÖDERLUND

Legal Affairs ARNO LINDGREN

Management Secretarial Staff HEIKKI T. HÄMÄLÄINEN

Market Operations MARKUS FOGELHOLM

Monetary Policy PENTTI PIKKARAINEN,  
Adviser to the Board: KARI PUUMANEN

Organization and Management Development  
ESA OJANEN

Payment Instruments ANTTI HEINONEN

Payments and Settlement RAIMO HYVÄRINEN

Personnel AURA LAENTO,  
Adviser to the Board: ANTON MÄKELÄ

Publication and Language Services ANTERO ARIMO

Research JUHA TARKKA,  
Adviser to the Board: DAVID MAYES

Security JYRKI AHVONEN

**Institute for Economies in Transition** PEKKA SUTELA

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## BRANCH OFFICES

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Kuopio, Oulu, Tampere, Turku

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**FINANCIAL SUPERVISION AUTHORITY** (functions as an independent body in connection with the Bank of Finland; it has its own organization chart)

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KAARLO JÄNNÄRI, Director General

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